



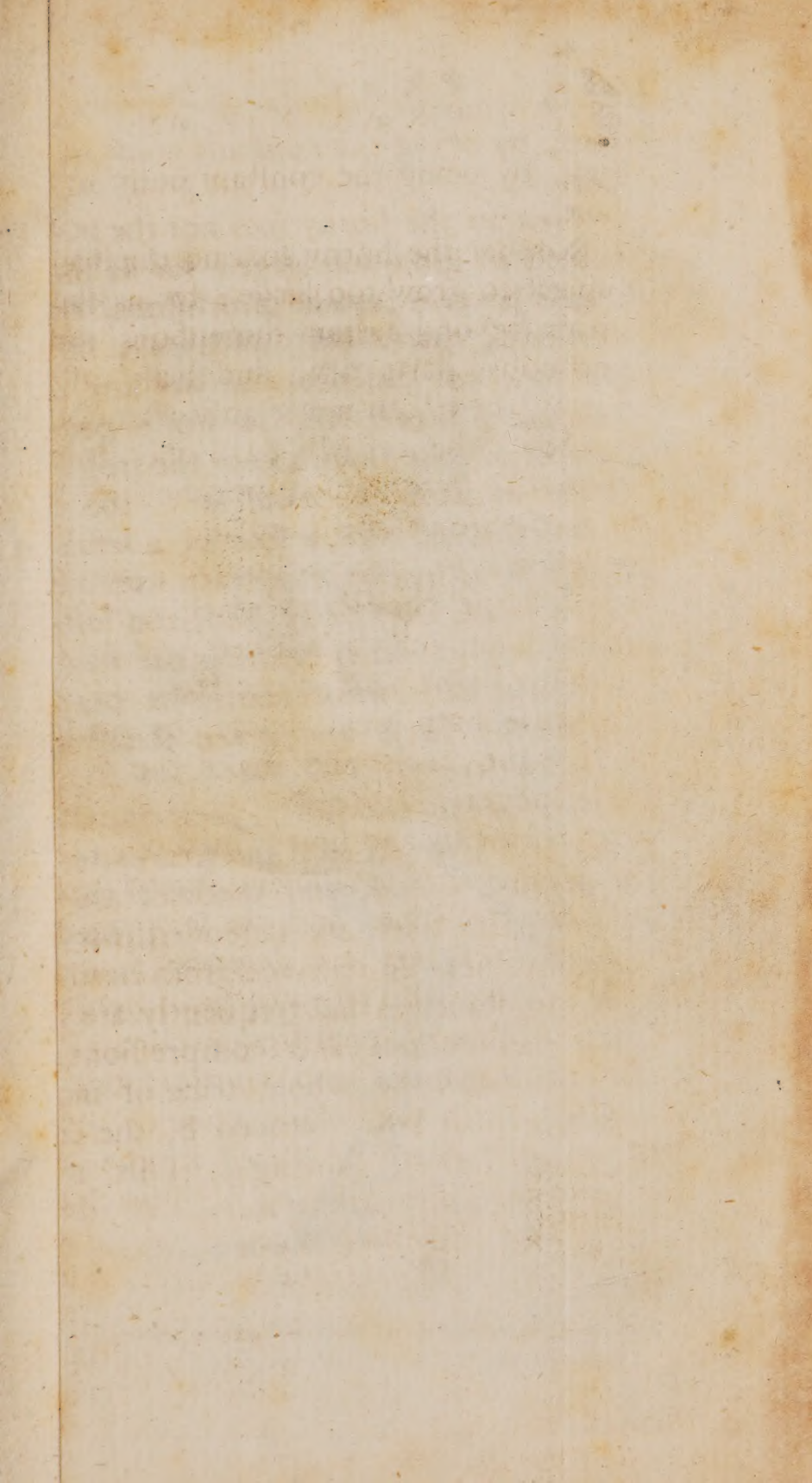


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M<sup>r</sup> Burton

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*The Names of the External Parts of  
a Horse*

A	{	The Noll bone & y <sup>e</sup> top of y <sup>e</sup> Head where it joins the Neck	C. The Nose
			D, D. The Lips
B	{	The hollow called the Eye-pit	E. The Onset
			F. The Breast
			G. The Shoulder
			H. The Crest
			I, I, I. The Mane
			J. The Withers
			K. The Arm or fore Leg
			L. The Shank
			M, M. The Back-sinew
			N. The Instep
			O. The Stifle
			P. The Thigh
			Q. The Knee
			R. The Hough
			S. The Hock
	T, T.	{	Fetlock or Pastern
			Joints
			U, U. Pasterns
			V, V. The Quarters
			W, W, W. The Hoofs
	X, X.	{	The Coronet or
			Crown
			Y. The Elbow
			Z. The Belly
			a. The Group or Rump
			b. The Loins
			c, c. The Flank
	d, d.	{	The Reins which
			reach from y <sup>e</sup> short
			Ribs to y <sup>e</sup> Haunches





P R A C T I C A L  
F A R R I E R Y ;

OR, THE  
COMPLETE DIRECTORY,

In whatever relates to  
The FOOD, MANAGEMENT, and CURE of  
DISEASES incident to HORSES.

The whole ALPHABETICALLY digested, and  
illustrated with COPPER-PLATES.

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By J O H N B L U N T, Surgeon,  
at Leominster, Herefordshire.

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L O N D O N,  
Printed for G. ROBINSON, in Pater-noster Row.

MDCCLXXIII,





## POMERLE E. F.

I T plainly appears from the history of the most ancient nations, that the Horse has always been considered as a noble and docile animal. The various and useful qualities he possesses were so well understood by the most barbarous nations, that many of them, who were ignorant of the common uses of life, were yet sufficiently acquainted with the uses to which he might be applied; and consequently treated him with a degree of fondness and attention proportioned to his merit.



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Modern authors have rivalled each other in bestowing eulogiums upon a creature so plainly pointed out for the most valuable purposes; and in this country, in particular, the Horse has been honoured with the attention of the legislature, several acts of parliament having been passed for encouraging and preserving the breed of an animal so useful in war, and which is now become a considerable article of commerce.

It is, notwithstanding, a well known truth, that, till very lately, the care of Horses has been committed to Farriers, who, totally ignorant of the true principles of science, were incapable of forming rational conclusions: and have therefore frequently, *with a desperate hand*, applied such remedies as served



## P R E F A C E. v

rather to confirm than to eradicate the disorder: to say the truth, nothing less could be expected from persons who were inattentive to the symptoms of disorders, ignorant of anatomy, and totally unacquainted with the power of those medicines they were hardy enough to administer.

It is not the author's intention to depreciate the labours of others: on the contrary, he is very ready to confess that several writers, particularly Bracken, Gibson, and Bartlet, have done considerable service to the public, by introducing a rational mode of practice, and rescuing the art from a dangerous set of empirics. But in Farriery, as well as in other useful arts, there are many desiderata; and therefore the slightest

est



est attempt to improve an art so confessedly useful, needs little apology.

Those who are conversant with what hath already appeared on this subject, will, on the slightest perusal, perceive the advantages of the method here adopted, for facilitating their practice; and those who are less acquainted with such writings, may depend upon meeting with a concise and easy arrangement of the most valuable observations of former practitioners, illustrated and established; joined to a variety of useful and important particulars, not to be found in any other work on the subject.

The treatise is arranged under three general heads.



I. Of the Horse in general; his Food and Management.

II. Of the Diseases incident to Horses, and the Method of Cure.

III. Of the Drugs and Medicines, most efficacious in those Disorders to which the Horse is subject.

Though the particular subjects of each general division are alphabetically ranged; yet as there are a variety of important articles interspersed through the whole, which may require an Index, that assistance is not omitted. The author has also given a list of Drugs; and pointed out a sure method of distinguishing the genuine from the factitious.

Thus nothing, it is hoped, will be found wanting to render this little piece an useful guide to a successful



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ful practice; and the author, conscious of having performed that duty he owes his country, desires no more than what every man has a right to expect—that the reader will use his work till he finds a better.



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# PRACTICAL FARRIERY.

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## PART I.

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To know the AGE of a HORSE.

**T**HE usual method of examining a horse's mouth in order to know his age, is not to be depended on after he is eight years old. Some horses lose their marks before they are seven, whilst others preserve many of them, having their teeth white, even, and regular, even to their sixteenth year; though, generally, before this time, the gums leave the roots of the teeth, they grow ill coloured, the bars of the mouth become almost smooth, and the eye-pits become hollow: grey horses grow white, and  
B look



look as if flea-bit; black horses become grey over their eye-brows, great part of their faces, about their muzzles, and their joints: the Spanish, Danish, Barbary, and Flanders horses, are very subject to sink in their backs, as their years increase. And there are but few, if any, whose joints are not stiff, whose knees and hocks do not bend, and that do not perpetually trip on riding down-hill, when they advance above ten years.

A little before a colt is three years old, he loses the four middlemost of his fore-teeth, called foal-teeth, viz. two above and two below: the teeth which follow in their places are easily distinguished by being much stronger, and nearly twice as large; they are called nippers, also corner foal-teeth, corner teeth, and gatherers; and when these four teeth are grown the horse is full three years old.

Before he is four years old, he casts four more of his fore-teeth, viz. one on each side of the nippers above and below; these are immediately succeeded by others, which when full grown, you may safely conclude that he is full four years old.

About the same time that these last named teeth appear, the tusks begin to shew themselves; it may be a little sooner



or later, so that when the tushes are full formed the horse is or may be a little turned of four years old : young horses have a sharp edge all around the top and on both sides of these teeth, and the insides of them are somewhat grooved.

If the tushes do not appear soon after the last named foal-teeth are cast, the reason is this, the foal-teeth have been pulled out before their time, to make the horse seem older than he is ; for when the foal-teeth are taken out, they are soon succeeded by the nippers, but the tushes having none that go before them, they never can appear before their proper time : hence a sure mark of a four-year old horse is these tushes, which are yet but small, and sharp on the top and the edges.

To know if the foal-teeth were drawn, feel about the edges where the tushes grow, and you will perceive their successors in the gums ; but if these last nippers appear some months before the tushes, you may conclude that the foal teeth were drawn at the age of three years.

When a horse is five years old, the corner teeth appear just equal with the gums, being filled with flesh in the middle ; by this time the tushes are more distinct, though



not at their growth : at this time the corner teeth are most to be remarked, they differ from the middle teeth in their being more fleshy in the inside, and the gums generally look rawish upon the first shooting of these teeth ; whereas the gums about the middle teeth do not seem discoloured. The middle teeth arrive at their full growth in three weeks ; but the corner teeth increase slowly, and seldom arise much above the gums before the horse is turned of five ; and from their resemblance to a shell, they have received the name of shell-teeth : as these teeth grow, the fleshiness within them disappears, leaving a hollowness in their inside.

At full five years these corner teeth are elevated above the gums about the thickness of a crown piece ; at five and a half they are about a quarter of an inch high ; at full six years they are near half an inch, and in a large horse, perhaps, may rise a full half inch above the gums.

The corner teeth in the upper-jaw appear before these of the under ; on the contrary, the tushes in the under-jaw appear before the tushes in the upper.

At six years the hollowness on the inside of the corner teeth begins to fill up,  
and

and what was at first fleshy grows into a brownish spot, and continues so until the seventh year; only with this difference, that the tooth is more filled up and even, and the spot becomes more faint.

When arrived at eight years the hollow-ness and spot in the corner teeth are usually worn out, though some retain some degree of them during several years after; and sometimes these marks are continued by hollowing the tooth with a graver, or burning it with a red-hot iron.

## B A R L E Y.

In many of the warmer climes they give their horses barley in the same manner as we in England give oats to ours; it is true that their barley is more solid than ours, and probably is more nourishing too: but the point of preference lays much in what a horse hath been accustomed to while a foal, and during his growth; wheat will purge as much as barley if the horse is not used to it, and yet either of them will stay well enough if often given.

To running-horses, hunters, and the better sort of saddle-horses, a change of diet, joined to their orderly exercise and dressing, is singularly useful; it is there-



fore adviseable sometimes to give them wheat, at others barley; sometimes to mix malt with their oats, and at other times to mix beans therewith.

## B E A N S.

Beans are the most nourishing food that is given to horses, and are particularly beneficial to draught-horses, and to those that are travelling, except when the horse is naturally too costive, as they are rather binding; however, when exercise and hard labour requires them, that effect may be counteracted by the admixture of a little barley or malt, or by giving them with plenty of good sweet bran.

Old beans, and in some seasons young ones, have insects in them, called weevils and red bugs, which are hurtful to horses; to prevent any harm on this account it is best to have the beans well dried and split.

## B L E E D I N G.

The general rule for taking away blood is, when it is good and there is too much in the vessels; then to lessen the quantity to that degree which best suits with health is proper: to bleed when the blood is poor, or when there is not  
more

more than health requires, generally does harm. This is to be understood absolutely, or when the quantity of good blood is too great with respect to a healthy state of the vessels.

There may be an excess in the quantity of the blood relatively, i. e. when, from a sudden rarefaction thereof, the vessels are distended beyond what is natural; or, when a spasm affects the vessels, and occasions a preternatural contraction of them; in these cases, though the constitution be feeble, and the quantity of blood absolutely deficient, yet, if the rarefaction cannot otherways be reduced, nor the spasm removed, bleeding may be necessary.

It is equally difficult and tedious to lay down rules for every circumstance that demands or forbids this evacuation, but in general it is useful more or less in the following cases, viz.

If a horse is not otherways ill, yet seems purfivè on being moderately exercised; when feverish; at the beginning of humours settling on any part before there is a tendency to suppurate, except this humour appears at or about the crisis of some other disease; sometimes bleeding may be admitted during suppuration,



particularly if the tension is supposed to create great pain with feverishness; in violent painful diseases, particularly at the beginning; inflammatory complaints; apoplexy; epilepsy; the beginning of colds; violent bruises and wounds, when there was not a great loss of blood when the accident happened; when healthy horses begin to look fleshy after being turned to grass; or when a healthy horse stands long in the stable, is full fed, and hath but little exercise; if you observe the eyes, lips, and mouth look redder than usual, seeming as if inflamed; and if from any cause not arising from poor blood, a horse seems dull, inactive, and loses his appetite; if young horses are feverish while they shed their teeth, they may now and then lose a little blood, more or less, as may seem necessary.

It would be well always to bleed by measure, for, not to mention the impossibility of guessing the quantity that falls on the ground, its quality cannot be so well discerned.

From four to six pints may be generally taken away from a middle-sized strong horse; and if the operation is repeated, allowance must be made for strength and the nature of the disease.

B R A N.

## B R A N.

If bran is fresh and sweet, it is very convenient now and then to give it with a few beans or peas, or alone, made into a mash, for it is gently laxative, so may be useful against costiveness. If on other accounts beans are required for horses that are costive, bran may be mixed with them as a preventive of that inconvenience being increased.

In lax feeble habits bran should be used with great caution, whether dry or in the form of mashes, because it weakens their stomachs and bowels too much.

When it is old and musty, it is very pernicious, both by injuring the stomach and bowels, and by disposing to the generation of worms.

A poultice may be made with scalded bran and a little grease, equal in neatness and usefulness to any other; it may be applied in all cases where one made with the crum of bread is used, as indeed, wherever the intention is to give warmth to the part on which a poultice is directed, and when suppuration is to be promoted.



## B R E A K I N G   C O L T S .

No man, however great his skill, should attempt to break a horse, except he be also patient and of an easy temper.

The earlier colts are accustomed to be handled, led in a colt-halter, and accustomed to have light things laid on their backs, the better; it is a great error to let them run three or four years before attempting to break them.

During the time of mouthing a colt, a boy, made of rags, may be placed on his back, while the jockey leads him with the bits in his mouth, thus he will more easily take his rider.

When first mounted, he should be made to walk as fast as possible, and should not be permitted to go into any other pace for a month or more, or at least until he can perform the walking pace well; which effected, he must begin to trot, and the rider, when on his back, must keep him close to a full trot: this pace being well learned, he may in the same manner proceed to another pace, if required, as cantering or gallopping, according to the uses he may be designed for, always observing to make him perform

form one pace well before you proceed to another; but when all are learned, he must alternately be exercised in them all.

Cat-ham'd horses, and some others, from their make, are apt to hew or cut one side of the feet with the shoes of the opposite side, to prevent which, when they are in the jockey's hand to break, he must keep them at full stretch in teaching them each of their paces, but particularly when they are learning to walk the rider should have a whip with a good lash on it, of a just length to whip the horse's thigh just above the hough, where remember frequently to lash on both sides, thus these horses will form a habit of taking up their feet so as not to injure themselves.

### CH U S I N G A H O R S E.

After all that can be said on this subject, the chief depends on a natural taste joined with experience: however, though all the rules hitherto given fall short of their end, the observations of the skillful may not be without their use, and the principal of them are here inserted.

Broad dangling ears, the neck like that of a sheep or a goat, a goose rump, and



wide hocks, any of these give an ungraceful air, and denotes the horse to be sluggish; some of these defects occasion bad motions. Cat or battle-hams look mean, and are generally accompanied with weakness. The vicious, fearful, fretful, dull, or otherways visibly defective horses, none need be forbid to buy them, for as soon as they are known to be so, their imperfections will naturally determine against them.

As to the eyes they demand great attention and experience, and it should be remembered that before six years of age horses' eyes are not so clear and bright as they are afterwards; nor is a clear eye alone to be depended on, for many such go blind, especially those that have a heavy countenance, and lowering brows; and those are the most to be suspected that have a fullness between the upper eye-lid and eye-brow, with a fullness also round the under eye-lid, by which the eye appears as if surrounded with a ring: such horses are fleshy about the head and jaws; this subjects them to defluxions on the eyes on every cold they take, and many such have cataracts before they are eight years old. If the membrane under the eye-lid is thick, if the caruncle in the  
large

large angle of the eye is spongy and watery, or if the eye is flat, as though sunk in the head, such horses may be suspected of speedy blindness. The very small and the very large eye are both in danger, the one from the want of the necessary fluids, the other from too much of them. Long oval eyes, where the two angles are pointed like the small end of an almond, are always weak. If a horse stares, looks upward, and lifts his feet high when he is led out of the stable, his eyes are failing. If you hold up his head as though you would drench him, and observe a languidness in the eye, it is a bad sign. When the circle which surrounds the pupil is distinct and of a pale variegated cinnamon colour, the eye is good; but if this circle is muddy, and its outer edge be whitish, that eye is not to be depended on. The wall-eye is generally good. If you lead a horse into a dark place a minute or two, then, as you bring him into the light, if you observe the pupil to contract immediately, that eye is good; or where there is no convenience of leading him into the dark, close his eye-lid, and cover it with your hand for a minute, and if the eye is good the pupil will be seen to contract itself as soon as the light is



is admitted through it. If the eye-lid and the outer coat of the eye are thin; if the caruncle next the nose is small and not watry; if the eye is sprightly, and the horse looks brisk about him without any fear, the eyes are good.

Thick-shouldered horses with short thick necks generally bear heavy on the bit, and soon grow tired. Thick, fleshy shoulders seldom move well: thin shoulders admit of the most agreeable motion, but if the chest be narrow too, then the horse is weak. When the chest is narrow, the horse turns his elbows inward and his feet outward, crosses his legs when he trots, and is apt to cut and stumble frequently, though they do not fall so often as the thick-shouldered do. A horse whose breast projects so as that the fore-legs seem to be placed very backward, may do well for the draught, but he is too apt to fall to be safely rid on.

A slender body, a weak carcase, and a bulky body too, is not well adapted for motion. When it is of a moderate size, with large ribs, full smooth flanks, the back strait, or very little sinking, the hind-parts not rising higher than the shoulder, the horse is good and strong. A low back is weak, and a roach back  
is

is a little unsightly, but a small degree of the latter makes a good horse either for the road or the chace. Short backs with long legs are not often strong. Homed horses, though both strong and slightly, yet if put to violent exercise, they seem to lose their breath very soon, and are apt to go broken-winded.

The knee should be strait, the shin and shank thin, the back-sinews strong and tight, with a perceptible distinction betwixt it and the bone, so that the small of the leg may seem rather flat than round. The hocks should be lean, and the pastern-joints clean from all excrescences. Long pasterns are often weak, and short ones that do not bend are bad. Short pasterns make the leg look strait from the shoulder to the foot, like the leg of a goat; such horses are bad travellers.

The feet, though well shaped, yet are bad if the hoof be too thick or thin, and large feet are generally bad. When the foot is of a middle size; the hoof smooth, tough, and not wrinkled; the heel firm, open, and free from sponginess, or other disease; the frog dry and horny; the sole hollowish; it is good, whatever be the colour; though the blackish hoof, like that of a deer, is generally preferred.



A too thin hoof is easily known, by the nails that fasten the shoe being driven high; or when the shoe is off, the bottom of the crust appears ragged. When the hoof is thin, the heel and frog are soft, and tender, and the horse often treads awry. A too thick hoof is known by the distinctness of its fibres, which generally run direct from the coronet to the toe; also by the nails not going up high in the hoof, and a firmness of the edge when the shoe is taken off: a strong hoof is subject to cracks, and often by pressing the parts within it occasions pain. Narrow heels are bad; the quarters should have a round turn as they approach the heel: if the heels are either high or low they are faulty. A flat foot with a soft foal, or the two fore-feet of different sizes, subject the horse to much inconvenience.

Splents, ringbones, windgalls, spavin, &c. should be looked for.

The colour of horses is not much to be regarded in judging of their goodness. The only observation on the temperament of a horse that is useful is, whether he hath too much or too little fire; those with too much are untractable, and cannot bear much fatigue; they feed poorly,  
lose

lose their flesh when travelling however well they are used : they are for the most part short-lived, as they are particularly disposed to fevers and all the variety of acute diseases. On the other hand, where there is too little fire they are sluggish, and disposed to every disease that can take its rise from poor blood.

Horses with too much fire are generally hot and fretful, but should be distinguished from the eager craving horse that strives to be the first in the chace and in the field : the eager horse goes out coolly, never shewing his spirit until there is occasion ; whereas the hot horse begins to shew his intemperance as soon as he is out of the stable, and continues to do so until he is fatigued, which is usually before he hath done his work.

Horses with too little fire are dull and sluggish, they stand as a direct opposite to the hot and fiery : if they are spurred, or otherways pushed on, they move as if they were in a hurry, but yet heavily : these horses, though unfit for the saddle, are very useful in the draught.

Fear is seldom overcome in a horse until he becomes useless; he is easily known by his startling, crouching, and creeping.

Vicious



Vicious horses are generally quiet with men, though they are mischievous with other horses: some are only at enmity with men, but this is always the effect of abuse received from their first managers, whence those who break young horses should be very careful to treat them kindly. Those that are sociable with men and not so with their own species, have the most courage, and the best qualities; they always shew themselves sensible of having a good rider, when they have the good fortune to have one on their backs. Vicious horses lay back their ears, shew the white of their eyes, look angry, and are very perverse; they frown, raise their heads, bring one of their hind-legs forward as if standing on the defence. It should not be forgot that some good-natured horses will lay back their ears, but at the same time they look pleasant, and will bite the crib, or nibble with their teeth whatever is near, that they can lay hold of.

### D O C K I N G.

This operation, simple as it seems, is often attended with disagreeable circumstances, which yet seem to be wholly owing to improper management, all which  
may

may be avoided by carefully observing the following directions.

Always let the knife pass through the tail, from above downwards, and let the searing iron have a good polish on it; let it be made very clean before it is applied to the stump; great care should be taken that it is not so hot as to bring the burnt part away with it, nor yet so cool as to require a second application.

When the eschar digests off, wash the part with water in which alum is dissolved; but if it seems inflamed, it must be digested with the digestive ointment spread on lint or on soft tow.

### D R E N C H I N G.

The drenching-horns should not hold more than half a pint, for a larger quantity makes a horse cough, and almost suffocates him.

Horses are extremely nice creatures, and their stomachs are more affected with what is disagreeable than the stomachs of men are, in general; therefore, if powder in the drench is disagreeable to them, which generally is the case, let the drenches be always clear, and give the powders with bran, or mixed with the oats. The drench should be made palatable too;  
bitters



bitters are seldom relished well by horses, but they will take sweet things with great readiness; it is best then to form the more disagreeable medicines into balls, and the more agreeable may be given in a liquid form, liquorice or honey are sweets that most horses take very readily.

When a drench is given, hold up the horse's head pretty high, until all the liquor is run down into the stomach.

In coughs, fevers, pleurifies, and some other diseases, powders should never be put into drenches, for they excite a cough; and the drenches should be given with the utmost caution and gentleness, for any violence used in such cases will sometimes do more harm than the medicine will do good.

## D U N G.

When there is either abundance of acid juices in the stomach and bowels, or when the bile is deficient either in its quantity or its quality, the dung will be proportionably pale, and will have proportionably but little scent.

In summer, if horses are kept up in the stable, and indeed some that run out, discharge a hard, dry, and high-coloured dung in the form of little balls, and with

a strongish scent; the cause of this is a too great secretion of bile into the guts.

A mixture of much thick slime with the dung indicates a weak digestion

If the dung is thin, and frequently discharged, though the appetite is good, yet if the flesh wastes, the most nourishing part of the chyle is hindered from passing into the blood, by a viscid slime that abounds in the guts.

When the dung is voided in little round bits like large peas, they shew either a preternatural heat in the guts, or an obstruction of the mucous glands of the intestines.

## E X E R C I S E.

However necessary exercise is to health, it is yet subject to certain restrictions: as to its regulations under certain diseases, directions being given in treating of each, it will be sufficient here to make two or three remarks of some importance when a horse is in health.

And, first; habits should be gradually worn off. If a horse hath been long unexercised, bring him gradually to it; or if used to a particular diet, wean him gradually from it; thus he will be subject



to the fewest and the least inconveniences, &c. in other instances.

Secondly; a horse should never be pushed on to violent exercise, when his stomach is full either of meat or of water; let him go on gently for awhile, then gradually increase his speed.

Thirdly; after hard or violent exercise, take great care that the horse does not cool fast, nor drink any cold water. If opportunity favours, you may now and then give him a little cold water during his exercise. If on a journey, slacken his pace the last mile or two, and let him after that be led in the hand for half an hour before he is put into the stable; though, if the weather will not admit of this, let him be rubbed until he is cool.

Fourthly; except some urgent business demands, horses should neither be exercised violently nor at unseasonable times, either of these injure more than having no exercise.

## F E E D I N G.

Perhaps there is not any thing more difficult than to lay down rules for feeding horses, their age, strength, exercise, and constitution, varying so much, not only in different horses, but the same horse

horse at different times: yet this one may be given as a general one, viz. all horses that constantly work should be well fed; others should be fed in proportion to their exercise, and not be kept to certain feeds whether they work or not.

As to the following they may be considered as useful hints to be varied at the discretion of the reader, as the variety of particular cases occur to him.

Young horses should never have peas or beans mixed with their straw, for they pull out the straw to find the beans, &c. and thereby get a habit of pulling all their hay out of the rack into the manger, or on the ground, with the same expectation. While they are growing they should have more allowance in their feeding than is necessary afterwards; but if they have little or no exercise, so that hay is not necessary to be kept all the day before them, let them at least have a little fresh straw at all times in the crib, to prevent their nibbling the manger.

Some horses suffer great irregularities and changes without any harm; but the finer sort of them that are bred here, and those that come from warmer climes are much affected thereby. Many horses will  
pine

pine if not indulged with grafs at a proper season ; at that time they are parched and thirsty, can hardly eat their hay : when out of the stable, they are ever looking for the green fields, even so as to be troublesome to their rider : such horses should be indulged during the grafs season.

If a horse is observed to eat his litter, or clay, &c. give him cut straw, with burnt hart's-horn with it, or chalk may be given him ; for this irregularity is owing to a disordered stomach, requiring absorbents and warm strengtheners.

Hay should be always well shook and given by a little at a time ; if it was always sprinkled with water it would digest better, and the horse would require less drink ; an advantage of no little consequence in favour of thick and broken-winded horses.

Running-horses should have the best and sweetest oats, with one sixth part of split beans, and a large handful of wheat in each feed.

It is a good method of feeding coach and other draught-horses, when on the road, with bran and beans before they have their oats ; and that particularly when they are subject to scouring, or to  
costive-



costiveness, for the bran keeps the bowels easy, and beans prevents both scouring and excessive sweating. Some oats are necessary every day, though a horse hath but little work to do; if he hath none, it is a great hazard if he does not suffer when he begins to work.

When a horse travels, or works, six pints of oats at least should be given him each day, with one pint of beans; and if his labour is great, the feeding may be proportionably increased, even to eight quarts of oats and one quart of beans: the usual appetite of the horse, and the degree of his toil will determine the mediums between these two extremes: and as to hay, as it is far less nourishing than corn, if they have their due quantity of corn, they will eat proportionably less hay.

The morning feed should be given early enough for its being a little digested before the horse is taken out to work; this method prevents their thirsting for water, which they will do though they drank plentifully in the stable.

While horses are hot with their exercise, be very cautious of letting them drink, except after long travelling or otherways toiling; when, if their mouths

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seem

seem parched, they may have a little water now and then, as they continue their exercise immediately upon it. If a horse is hot after strong exercise, let him be walked about gently till he is cool, and while he is cooling, feed him out of the hand with a little hay : when cool, allow him to drink ; and after that let him eat without restraint.

It is usual when a horse begins to feed as soon as he comes from his labour, to conclude that his ready appetite is a sure indication of the good state of his health ; but, notwithstanding this opinion, except the horse is pretty well cooled, he should not be fed, except with a little hay out of the hand of his leader. The best method is, after he is sufficiently cooled, by walking him gently, or by good rubbing, to give him a rack full of hay, after that give him water as much as he will drink ; let him then stand at his hay for a quarter of an hour, then he may be fed with corn, according to the discretion of his manager, remembering, that if he hath farther to travel, or a part of that day's labour to perform, the full meal is not to be admitted until the work of the day is ended.

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An appetite to food is not properly a proof of health, nor even of a good state of the stomach; for weakly stomachs have frequently a keen appetite, and the blood vessels of the stomach being turgid with the preceding exercise, the power of digesting easily is farther diminished, so that no signs or circumstances can justify filling the stomach of a horse, before time is allowed to allay the rarefaction of the blood, and lessen the fullness of the vessels. (See APPETITE WEAK, in Part II.)

Feeding horses in the house with grass just mown, or other young tender and succulent herbage, such as green barley, clover, tares, or what else the season produces, is called foiling: this method is principally in use for stallions, as it is difficult to find inclosures that are suitably fenced to confine them; though sickly horses are sometimes treated in this manner. Green barley, before the ear is formed, is the best for this purpose; it is then most filled with sap: tares and clover should be very young, and should be cut fresh every day; it is yet better if they are cut immediately before they are eat, though that should be two or three times in the day; for the main end of

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foiling



foiling is to cool, and to keep the bowels open, therefore, the younger and fresher the herbs are, the better this end is answered; and if care is not taken in this respect, but you carelessly give the horse old herbage that is growing fibrous, it will be the cause of diseases in the bowels, by tending to putrify there, as is evident from the dung of horses, that have been thus ill managed, appearing like what is laid to rot on the dunghill. If a horse loses his flesh much with foiling, it must be changed for more solid diet; for though in grazing, a horse will at the first lose his flesh, because the grass purges him, yet that effect is soon lost, and then he recruits again; but this is not the case with foiling.

### F I R I N G.

Firing is the application of a red-hot iron to any part; it is also called cauterizing. It is used in many different cases and with various intentions, and consequently, some circumstantial difference will occasionally be observed in the mode of performing this operation, but in general it is thus: the firing-instrument is a thin flat piece of iron, with a blunt

blunt edge, but growing thicker all the way to the opposite edge, as is seen from the edge to the back of a knife: this iron being made red-hot, observe not to apply it until the flaming redness is gone off, nor to delay any longer than to that instant. Some skill and dexterity is required in this operation, for the skin must be burnt through, but no part beneath should be affected by the heat; if the skin is not burnt through, the cicatrices will not be hard enough to press firmly on the subjacent tendons (in cases where an increase of strength is intended), and if the subjacent tendon is burnt, it would, by losing a part of its substance, soon contract and form an incurable lameness.

When the operation is performed to strengthen relaxed tendons, the lines that are made with the firing iron, should be very near to each other on each side of the tendon, according to the course of the hair, carefully avoiding all other directions, for they would disfigure without any advantage to counterballance; these direct lines passing through the skin, when filled up again, being somewhat hard and laying so near to each other, they form a

fort of compressive bandage upon the tendon, and greatly encrease its strength.

### G U E L D I N G.

This operation, when performed on young colts, is neither difficult nor dangerous; but if the horse is full grown, the symptoms consequent on it are not so easily managed.

In young colts an incision being made through the scrotum, on each side of it, the testicles are pressed out gently and cut off; then the extremity of the spermatic chord is seared with a hot iron, to prevent an effusion of blood; but in older horses it is better to tie the chord round with a waxed thread than to cut the testicle. The wound may be dressed with lint, and the digestive ointment secured on the part so as not easily to be rubbed off.

### G R A S S.

Fine horses, which for the most part are kept in the house, but that require a little running at grass, are best if turned out in the months of May and June, for then the grass is the best, and the season is not become troublesome either with heat or with flies. If they are permitted to run all the summer, be careful to take them



them into the stable before the long nights come, or the rainy season, for thin-skinned horses suffer greatly if exposed in the night, or if they are much in the rain.

Most of the more useful kind of horses are the best in health when they run all the year round at grass, provided they have a dry field, a proper shed to run under to shelter from the rain, hay to go to in due quantity, and their corn given them regularly according to their work; for thus they move about at pleasure, keep their limbs clean, and are at all times ready for action. Many gentlemen keep their hunters thus, and they go through the chace and perform all their exercise as well as those that are kept in the house, with the constant and troublesome charge of dressing and airing them. Besides all this, horses that are thus kept all the year in the field, have early the benefit of the spring-grass without waiting for warm weather, of which, in backward seasons, they are almost deprived. The spring-grass is gently purgative, and a great attenuant.

Short thick grass that grows on dry fertile ground, which hath been used for pasture only, and that requires but little dunging,

dunging, is the best for horses to feed upon; commons, parks, &c. are the most proper. If you turn horses into meadows be sure that they are dry, and that they have not been much manured. Horses get flesh on meadows fast enough after they are mown, but they lose it speedily. The long rank grass is generally sour, and so proves hurtful, much more so than the hay made of it, for the fermentation which the hay undergoeth, soon after it is stacked, improves it very much.

For grazing-horses, poor ground, if it be of a good kind, produces very sweet and hearty food, on which they thrive better than on a richer soil that is made so with loads of dung: on this poorer ground, when the season is dry, the horses eat the roots of the grass with great pleasure and equal benefit: the roots are more cooling and diuretic than the grass itself.

As much as possible avoid putting a horse to grass near a great town, because of the excessive quantity of manure that is laid on the grounds there; for a short time in spring this sort of grass may not be amiss, because he can pick it here and there where it is the sweetest, but he will soon either lose his flesh or become  
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pot-bellied. The quantity of dung laid on the meadows may force a great quantity of grass, but as there is too much to be well digested, the grass is as faulty in its quality, as it exceeds in quantity.

In many diseases, as will be shewn in the course of this work, running at grass is either a cure or a great assistant to other means, such as lameness from disorders in the muscles, hurts of the tendons, costiveness, contractions of the tendons, shrinking of the muscles, especially if on the opposite foot a patten-shoe be placed, for then the shortened limb being on the stretch, the defective parts are recovered to their natural state. But of all the cases where the benefit of grass is perceived, none are more remarkable than that of broken-windedness.

Sometimes when horses are taken up from grass, they grow costive, in which case give them bran or chopped straw with their corn, and now and then a feed of scalded bran for two or three weeks, after which the corn may be given alone, but in small quantities, and often, with plenty of water and moderate exercise.



## H A Y.

Horses bred in Scotland thrive well with straw: hay is obviously a richer food, yet without the assistance of corn, our horses in England cannot endure much fatigue. Hay requires not only much drink to digest it, but also a large quantity to support a horse that uses much exercise, both which are hurtful to the stomach by over distending it; and, for bad winded horses, by filling the belly too full for admitting the lungs an easy play.

In general, short hay is the best; the long rank hay is always dusty, and requires to be well shook before it is put into the rack. Short hay is the product of hot dry summers; it is then the best, and the same quantity goes farther. If short hay is good, it never need be shook, for it is full of seed, which is the most nourishing part, and almost as acceptable to a horse as corn.

The best hay is that which is hard, of a pale green colour, full of flower, and that hath a lively, quick, and agreeable smell; though some say that hay is as good, if it hath all the other marks of perfection, though the flavour be lost  
in

in a great measure ; this defect is owing to standing too long in cocks, by which the more volatile parts are concentrated, but not dissipated.

Hay that is dried in temperate and shady weather, yet sufficiently warm to dry it with moderate speed is the most natural. The sun, if very hot, exhales the finest, most spirituescent parts, and injures what remains of the nutritious ; and if the season is rainy after the grass is cut down, the hay will have its virtue soaked out as it were before it is fit to be taken into the house.

After hay is housed, or formed into a stack, it undergoes a fermentation, which improves it much, both in its flavour and in its spiritous quality. And new hay, before it hath undergone this change, seldom agrees except with strong hard-working horses : in general, new hay may be used by Christmas, but the best rule is when it hath acquired a pleasant and a lively flavour.

Hay that is housed, or stacked before it is properly dried, soonest ferments, and the fermentation runs so high as to heat, and sometimes to kindle a fire, by which the whole will be burnt, without due care to prevent it. When an accident of this  
sort

fort happens in such a degree as for a part of the hay to be burnt, the other part having a sort of astringent property, and perhaps some other quality, by the heat it hath been in, may be given to some sickly horses for fodder if they like it, and very often they do; but observe to change it for more wholesome hay, when it begins to make them costive, which it seldom fails to do.

Grass that hath stood after it was ready to cut down on account of rainy seasons, is generally rotten at the root, and when made into hay should not be given to horses before it is well shook to free it from the rotten parts.

Clovers of all kinds are more spiritous and nourishing than hay, but constant feeding on them, proves very surfeiting, and often occasions the colic. It is best when mixed with a larger portion of hay, particularly that made of rye-grass.

Rye-grass hay should not be used after Michaelmas, except the weather be very dry, for in damp weather it attracts so much moisture from the air as to become musty, and otherways unwholesome, at least for horses, but horned cattle feed well on it and thrive.

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It should be a particular care among all that have the charge of horses and of haystacks, that no more hay is cut at once from the stack than is necessary to be given at that time, and that more especially in damp and wet weather, for it soon turns soft, grows musty, and loses all its good qualities.

## N I C K I N G.

This operation consists in dividing the depressing muscles of the tail, by two, or at the most three transverse incisions through them. The dextrous operator will easily avoid the arteries, as they usually lay higher up the sides of the tail, than the muscles that are to be divided do; and almost all difficulty and troublesome symptoms will be avoided, by care, in cutting quite through the muscles, leaving not the least part of them undivided: the usual consequent pain, inflammation, and swelling, are owing for the most part to neglect herein. The incisions should be made parallel with the joints, but need not sink deeper than is necessary to divide the muscles. A crooked knife with a blunt point might be introduced under each muscle that is to be divided, by which the incision would easily

easily be made, and no other part in the least injured. See these muscles, as to their number, situation, &c. in Stubbs's excellent Tables of the Bones and the Muscles of a Horse.

The incisions being completed, the easiest method of supporting the tail upon or near the back of a horse, will keep the sides of the wounds at the greatest distance, in the best state for filling up the chasms with flesh, and forming a large callus; both which will greatly assist the muscles which elevate the tail, (and which now have no antagonists) in keeping it in the desired position.

When the incisions are made, the ends of the tendons start out, and it is usual to cut them off; but this answers no useful end, and is entirely unnecessary; dress up the incisions with soft dossils of lint, spread with the digestive ointment, and fill up the hollow with soft tow laid upon the back of the lint, all which fasten on with a roller just tight enough to keep the dressings on; in two or three days take them away, then renew them every day after, until the whole is healed.

In case of inflammation, &c. which rarely happens when the management is

as above, bleed, and proceed as in such cases from any other cause.

To secure the tail in the most favourable manner, before the incisions are made, let the hairs of the tail be platted and secured so as not to incommode your future proceedings. The incisions being made, and dressed as above directed, instead of fastening the tail to a pulley, let it be turned up to the back of the horse, and there fastened on a pillow which is to lay on the rump as a support and guard to the tail; this pillow being secured by straps, from a surcingle about the body, will be both easy and conducive to the main intention. Thus the horse will be at liberty to be rid out to water, and for necessary exercise, as also to lay down at nights.

If the hair comes off from the rump near to the tail, rub it well with tincture of myrrh.

Let the tail be continued upon the pillow until the wounds are healed, and the callus formed; only, after the first eight or ten days, let it have more liberty in the day time; and now and then when you ride him to water, and to exercise him a little, the tail may be quite loose,  
in



in order to your observing how it will stand.

## O A T S.

Oats are cleansing and healing; they do not heat so much as wheat, nor cool so much as barley. Some think that a free use of them is heating, but experience does not manifest this; for the more horses feed on oats, the less drink they require, even less than when they have hay alone.

Oats require much less water to digest them than is required to digest hay. It is true that plenty of oats makes a horse neglect his hay: the reason is, oats are warmer and heartier feeding than hay, so that it is less required where a due supply of them is allowed; and as to the surfeits, and other diseases brought on by plentiful feeding on oats, it is the excess of quantity in which the error consists, and not the faulty quality, and perhaps the want of due exercise at the time of being so fed.

Full ripened oats agree the best of any sort of grain with English horses. The best oats are heavy, thin shelled, not husky, and make a rattling noise when you pour them into any vessel. In the cold

cold northern countries, and on moorish grounds, the best are produced. If they are husky, more must be allowed at each feed. As to the colour it matters not, so that they are sweet and sound. In damp weather they grow musty; but if they are spread thin on a boarded floor and frequently turned, they soon recover their sweetness; but the fresher, newer, and sweeter they are, so that they are well dried, the better; if carefully dried in the kiln they are best.

## P E A S E.

Pease agree so with beans that it is difficult to say which have the preference, or even wherein they differ as to their use; but their straw hath greatly the advantage over that of beans, for it is a very serviceable and agreeable food too for strong working horses.

## S A L T M A R S H.

The benefits of salt marshes are such, as to render the convenience of turning disordered horses on them above all other means desirable. The inconveniences usually attending the human species, who reside on or near these sort of pastures,

pastures, are never observed to attend horses that run there all the winter; on the contrary, diseases in horses that are similar to those that affect men, who live here are readily cured, and a firm healthy habit is the constant effect of feeding in the salt grass, except where the disease is irremediable by any other means than that which puts an end to all diseases, even to life itself.

The sea salt, with which the grass on the marshes, and the water which the horses drink there, are impregnated, is gently purging and diuretic, and also gradually increases the natural heat of the constitution by a continued use of it. At the first, some few horses will not relish this sort of diet, but it soon becomes as agreeable as that where only fresh water falls. The qualities of the salt occasions a purging at the first, which gradually abates as the constitution is recruited, and it continues to be a gentle aperient, and the horse's flesh soon begins to acquire a particular but healthy firmness.

No horses are so free from accidents and illnesses as those that feed all the year in the salt marshes: the soil is usually a light fine mold mixed with sand, so that descending rains are soon either  
absorbed



absorbed or otherways carried off, which admits of the horses laying constantly dry; and, however bare they are, if the ground is not frozen or covered with snow, the horses always find food enough to keep up good flesh, and fodder is not necessary except in the two just named cases.

It is a considerable advantage too, that horses may be taken from the marshes at any time, and be immediately put to business without any hazard of injury. Where the convenience of the salt marshes cannot be had, a dry good common to run in, and as much sea-water every day as will keep the belly gently open, will be an excellent substitute.

The appetite and flesh which are lost by sickness, are the soonest recovered in the salt marsh. After surfeits, these pastures have a singular good effect. When from ill usage the limbs grow stiff; the legs swell, and are lame; the greatest and the speediest benefit is received from running in the salt marshes; as also in many other disorders, of which we shall treat in the Second Part.

## S H O E I N G.

The importance of proper shoeing is so great, with respect to preserving the feet and assisting the legs, by easing their motion and strengthening them, that it demands the most attentive regard.

It is, perhaps, in any art, impossible to lay down a general rule, which, however good, is without exception: circumstances in the roads, and peculiarities of feet, may require deviations from the most perfect method that can be proposed; but these lessen not the perfection of the general rule; the artist will adhere to it still, only varying where necessity obliges, and no farther than is absolutely required.

No author hath yet treated this subject so well as Mr. la Fosse; nor, indeed, has any one made any improvement on his method, therefore the substance of what he hath published is here inserted. The English method of shoeing race-horses confirms the propriety of Mr. la Fosse's observations, as sometimes they have to run over grounds that are slippery, and that have all the disadvantages that we pretend

pretend to say demands our present absurd method of shoeing.

Nature does not appear to have intended that horses should be shod: in many countries they are daily exercised in all the varieties of labour, without ever requiring shoes: in an instance of the feet being overgrown, or of some defect there, they may be necessary and useful enough. A great part of the absurdity of the English method of shoeing, consists of paring away the sole and the frog so much as to form the defect that requires these means of defence.

As to paring the horny sole, it can never be required, except there is some inequality there, and then the reducing of that to a level with the general surface, is all that can be useful: when this sole is hollowed by paring it away, the weight of the horse rests wholly on the edges of the hoof, which by this means are soon destroyed. By paring the sole very thin you subject the horse to pain and lameness, from the slightest impression of hard bodies; and farther, the air hath then a power of drying it so as to make it contract, and consequently press upon the fleshy sole and occasion lameness. If the horse is shod after such paring away and hollow-



hollowing the hoof, sand and gravel very easily lodge between the shoe and the foal, occasioning compression, inflammation, &c. In the fleshy foal the same accident frequently happens, from stones being wedged betwixt the shoe-heels. In short, from the texture and situation of the horny foal, it is clear, beyond dispute, that it is formed to ease and support the fleshy foal, and the great tendon (or back-sinew) against the violence of external injuries; but by paring it away, the design of nature is counteracted; the fence against stumps, stones, &c. on the road, by which horses are miserably wounded, is taken away.

By paring away the frog, a horse seldom goes so easy as before: besides this, if the frog does not bear upon the ground he sooner tires; the frog is the only point of support to the tendon; if, therefore, the frog is so cut away that it cannot rest on the ground, the tendon will be too much stretched at every step, and become inflamed; whence, in course of time, this part being weakened, defluxions and swelling, that are difficult to remove, come on there. These accidents, it is true, most frequently follow after long journeys; but it is not the journey properly

perly that caused these complaints, but the shortness of the frog, from having been pared away. From the structure of the frog, which is spongy and flexible, it is evident that it cannot suffer any thing from being left just as nature has formed it: it is true, that a little lameness may be occasioned by the frog becoming hard and dry; but all that is necessary in this case is, to cut off the little hardened end.

We now attend more particularly to the shoes; and observe, that the more easy they are, the more active the horse will be; and that large, long, thick shoes on the feet of horses, have all the inconveniencies of wooden ones on men. Long shoes, without having one advantage, are, by their length, the most subject to be struck off; and if they spread much on the foal, they make the horse trip, and stumble, and endanger his falling.

Among other errors, the pretending to assist the weak heels and fetlocks of horses by strong shoe-heels, is one of the most prejudicial; the shoe cannot yield to the foot; it, therefore, becomes a compress upon the heel, in almost every step,

step, by being the constant point of support.

Neither the horny sole nor the frog are subject to grow too large; for as they increase beyond certain dimensions, the superfluous parts dry, and scale off; soaring them can never answer any useful purpose: hence Mr. la Fosse proposes neither to pare the sole nor the frog: but if the edge of the hoof seem too long, to lessen it so, that a shoe of a semilunar form, large enough to reach the middle of the hoof, may be applied, and fastened on with eight nails in the usual way. If the horse hath weak hoofs, he proposes to thin the heels and make the shoes a little longer.

By this easy and simple method, all the inconveniencies of sand and gravel getting between the shoes and the sole, are prevented; the feet are defended from the injuries otherwise received from hard and sharp substances, that frequently are trod on, inflammations and compressions are avoided, with the whole tribe of inconveniences that are produced by the common method of shoeing. This more simple method hath this farther advantage, that it secures the horse from slipping,



ing, by admitting more of the surface of the foot to rest on that of the ground.

On the closest reflection, if we suppose no preternatural circumstance attendant, no end can be proposed by shoeing a horse, except one, and that is to preserve the beauty of the hoof. To point out, in a farther instance, the impropriety of the present method of shoeing, with the advantages of that above proposed, it may be observed that when a horse draws he first presses on his toe, then on the sides, and at last the heel of the horse presses the heel of the shoe, but immediately retracts itself. A horse that carries a burden, puts his toe but lightly on the ground, and rests chiefly on the flat foot, the point of support being betwixt the heel and the toe, whence it may be observed, first, that the effort of a horse's weight bears only on the middle of the foot; secondly, the greater the distance of the foal from the point of support, the more the pushing the coronary bone upon the nut-bone, will fatigue the back-sinew upon which it rests, by excessively distending it at every step.

TRAVELLING HORSES, how to manage them  
on a Journey.

It is usual to give a horse a feed of corn just before he is to set off on a journey, but he should be fed earlier, that the corn may be partly digested before he starts; and if he is watered before he eats the corn, he will be less troubled with thirst when he travels.

When the belly is full, let the exercise be gentle; and as the belly empties, you may increase his speed. A horse that hath been high-fed for some time, without being proportionably exercised, is unfit for a journey, except his rider is very judicious, and will be equally careful to bring him to by degrees, for otherways he will presently be jaded.

If necessity do not urge to greater speed, when you enter on a journey let the first day's ride be short; the next somewhat longer; the third as long as is convenient for continuing; the fourth, if you rest all the day, you may then proceed every day at the same rate as you went on the third day.

In hot weather allow your horse to drink a little and often, for that cools,  
refreshes,

refreshes, and enables him to proceed chearfully, and when you are within a mile or two of the place where you intend to rest, either for dinner or in the evening, let him drink till he is satisfied, and trot him after, so as to warm the water in his belly, but not so brisk as not to bring him in tolerably cool into the stable, where, when he arrives, if he is not cool enough, let him be led about until he is.

If very cold or rainy weather prevent your leading your horse about before he is put into the stable, let his bridle be taken off, and rub his head and neck dry, then slacken the girth, wipe his back clean under the saddle, and put some straw under in order to raise it a little from the back; after which rub the body and legs very well, and then take the saddle quite away. It is usual to lead a horse through water to clean his legs, even while he is hot, but it is better to let the dirt dry on than to use this method, for it subjects many horses to the gripes, colics, &c.

Until the horse is cool, though he seems ready enough to eat, it is best not to give him any food, except a bit of good hay now and then out of your hand, while he



is rubbed or walked about to cool; but when he is quite cool, give him his fill of hay and water: if he is to travel farther the same day, his allowance should be rather more sparing than at night, when he may be allowed as much hay as he can eat, and a quartern of oats, with one sixth part of beans, which may be repeated a second time if he requires it; but always take care to give him water before you give him corn.

Always encourage a horse to stop on the road when he would stale or dung.

Whether it be noon or night, as soon as his girth is loosened, it is prudent to feel under the saddle, and see if there be any knots, or if any other injury is done to the skin; and if there is, immediately rub it with camphorated spirit of wine, tincture of myrrh, and oil of turpentine, of each equal parts.

See at night if he is well littered, examine his feet, and see if the shoes are fast; if gravel, &c. is under them; if any nail or other body hath penetrated into the foot: in which cases let them be directly removed; and if there is any wound, drop a little Fryar's balsam into it.

If

If the horse is greatly fatigued, draw the two heel-nails out of each fore-foot, stuff the feet with cow-dung and vinegar, and give him plenty of sweet bran with his oats; if he is full of flesh, it may also be proper to bleed him.

## U R I N E.

It is impossible to distinguish by one sign alone what disease affects a horse: there is no proper method of obtaining this knowledge, but by comparing all the attendant symptoms with the known symptoms of the disease that is suspected.

However, in general, it may be observed, that when a horse is ill, and stales clear; if on standing it lets no sediment fall, the disease is increasing; but if it becomes of a reddish colour, or yellowish, with a cloud, which is neither black nor earthy; or if it lets fall a sediment, and begins to smell strong and disagreeable, the horse is growing better.

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# PRACTICAL FARRIERY.

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## PART II.

Of the DISEASES incident to HORSES,  
and the METHOD of CURE.

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### A B S C E S S E S.

**A**BSCESSES, called also imposthumes, humours, or gatherings, are generally the consequence of inflammations. When an inflammatory swelling does not readily give way to bleeding, purging, rubbing the part with spirit of wine, vinegar, or with such other means



means as are usually applied for dispersing; or, if it appears at the decline of a fever, or any other disease; all cooling and repelling methods should be avoided, and suppuration promoted.

For the cold, slow sort of abscesses that suppurate with difficulty, the gum plaster, mixed with one fourth part of the mercurial plaster, may be proper enough: it should be renewed when it will stick on no longer, for only until then is it good. For the inflammatory sort, which soon fill with good matter, poultices are the best application, and the following neat and cheap one may answer in every case of this kind.

#### A Suppurating Poultice.

Take a proper quantity of wheat-bran, scald it with boiling hot water, enough to make it into the consistence of a poultice, then add to it a small quantity of lard, or any other grease; and while it is as warm as you can bear it when laid on the back of your hand, apply it to the swelling.

N. B. All poultices should be stiff enough to prevent their running; and when they are designed to promote suppuration, they should be taken off and

warmed again as often as they cool, which will be at least every four hours.

Continue the poultice until, by pressing the abscess gently with your finger, you can perceive the matter in it fluctuate; at which time it will be proper to make an opening in the part where the skin seems the thinnest: make the opening as large as you conveniently can, for then the matter will be well discharged, and the wound will be healed with less difficulty.

The matter being discharged, dress with dry lint or soft tow, gently pressed into the opening, then cover it and the whole remaining swelling with a pledget of tow, spread with the digestive ointment; and over these, if the situation of the part will admit, lay a warm poultice, which may now be renewed only night and morning, until all remaining hardness in the abscess is dissolved; after which, once a day will be often enough to dress the wound, which will soon heal, with only a pledget of tow, thinly spread with the digestive ointment, properly secured.

## The Digestive Ointment.

Take of linseed oil, two pounds; yellow rosin and yellow wax, of each one pound; Venice turpentine, three ounces; melt them together over a gentle fire, then stir it continually until it is cool enough to put into an earthen pot.

Sometimes the wound and the bottom of the abscess digests unkindly, the matter becoming thin and sharp, in which case the assistance of the discutient fomentation, each time the dressings are removed, hath usually the desired effect; and if the bottom of the sore can easily be come at, pledgets of the mercurial digestive may be applied thereto once a day.

## The Mercurial Digestive.

Take half an ounce of red precipitate, in fine powder, mix it well with four ounces of the digestive ointment.

## A Discutient Fomentation.

Take of camomile flowers, and common wormwood, each three ounces; boil them a few minutes in ten pints of water, then pour off the liquor for use.

D 5 Fomen-



Fomentations are always to be used in the following manner. The fomentation being already as hot as you can bear it with your hand, you must have two flannel cloths, large enough, when three or four times doubled, to cover the part which is to be fomented; dip one of these cloths into the hot liquor, and immediately wring it as dry as you can; then apply it to the diseased part, keeping it close there until the heat begins to abate, by which time the other cloth will be ready to be applied, which must be done as quickly as possible after the removal of that which was first laid on: and thus continue to apply them alternately, until eight or twelve have been applied.

Abscesses are sometimes formed in the eye, occasioning great inflammation and pain: the matter is sometimes superficial, and then the abscess is more prominent; at other times it is deeper, and assumes a flatter form; but when it is very deep, there will be seldom any swelling at all; in which case it bursts inward, and the eye is totally destroyed. In the other two cases, the treatment will be so much the same with that of abscesses in general, that the peculiarities required on account of the situation, will be readily suggested by

by every practitioner. For the most part, a loss of sight is the consequence of them all, because of the cicatrix or of the ulcer which is left behind.

## A N T I C O R.

The anticor, so called from *anticœur*, or *against the heart*, is a swelling in the breast, of a troublesome nature; it sometimes extends the whole length of the breast and belly of the horse, and sometimes rises up the whole length of the neck to the throat, and is accompanied with a fever. When he lays down he groans; when he stands up he hangs down his head; but he cannot easily reach to the ground to gather his food: his fore-legs falter; and, at times, he has a general tremor. Mr. Gibson thinks the disease is similar to the quinsy in man.

In general, the cure is the same as in an inflammatory fever, viz. Free bleeding; frequent opening glysters, with nitre dissolved in them; cooling drinks, &c. with a poultice applied to the whole swelling, if possible, to bring it to digest: when it is opened it may be dressed as is usual in all common abscesses.

This swelling sometimes continues hard and will not digest; in which case make an opening into it in the most convenient part, and introduce a piece of black hel-lebore root into it, and let it lay there twenty-four hours; thus the swelling in that part will increase by drawing away the matter from the parts about it.

#### A P P E T I T E W E A K.

A horse's appetite may be naturally small; or it may be defective in consequence of other diseases: he may be dainty either naturally or from too much indulgence with corn. Violent, as well as too long continued exercise, will hurt the appetite; as will also the teasing and fretting, to which we see fiery horses subject. The too frequent use of warm mashes sometimes is the cause; or the cause may be some error in the stomach itself.

A more than ordinary fullness in the vessels of the stomach will excite a nausea, sickness, a want of appetite, and indigestion; and this often happens after exercise, taking cold, and in fevers. Reeves says, that the stomach of a horse is thinner than that of a man: and Gib-  
son



son observes, that the blood-vessels in the stomach are in proportion smaller than elsewhere: and thence he concludes, that a rarefaction of the blood, by distending the vessels, may easily take away the natural sensation of hunger, occasion sickness, indigestion, or other inconveniences.

If a horse's appetite is defective from some other disease, he leaves his food; but if it is an original disease, he is dainty, picks a little here and there, but soon leaves it. However little a horse seems to eat, while he keeps up his flesh and strength, he is not to be considered as diseased: but if his flesh and strength fail, and the cause be a weakness in the stomach, or a general relaxation, the dung will be soft, of a pale colour, sometimes consisting of food not half digested. Some horses that are frequently affected this way while they are young, become free from this disease when arrived at their full growth, and are as useful as any other horses.

In this disease, whatever be the cause, the exercise must be gentle, the horse must be kept dry, dry meat should be his chief food, such as the sweetest hay in small quantities, and oats with beans;

these should be frequently given in proportion, as their quantity each time is small.

If medicines are required, give from a quarter to half an ounce of aloes, rubbed well with a little salt of tartar, and made into a ball with treacle; and give it so as not to purge, i. e. as frequently as you can without purging, and wash each dose down with a pint of clean smith's forge-water.

If a purge is necessary in the beginning, give the following.

#### A Stomach Purging Ball.

Take six drachms of aloes, two drachms of rhubarb, one drachm of saffron, and make them into a ball with treacle.

This stomach purging ball may be repeated at the distance of eight or ten days; and on the days in which this ball is not operating, give an ounce of diapente every morning, and wash it down with a pint of forge-water. Or, if the powder is disagreeable to the horse, steep gentian-root, or other bitter ingredients, in forge-water, and give the clear liquor only.

If

If over-feeding be the cause, the cure is obviously to moderate the diet in proportion to the exercise, and the exercise to the strength of the horse. Fretful and fiery horses are the best when permitted to run out, except when the weather is hot, and flies are troublesome; and even then, if they have a shed to run under, the field is still the best.

### A P O P L E X Y.

This disease is generally called the staggers, and the stavers: it is, when a horse falls down suddenly, losing immediately all sense and motion, except a working at his flanks, occasioned by the action of his heart and lungs. The apoplexy, epilepsy, lethargy, vertigo, and palsy, are but different species of the same disorder, and to distinguish them from one another will be easy, on reading over what is said of them under their respective heads.

Its general cause is, whatever occasions a glut of blood in the vessels of the brain; and its different degrees are as the degree and duration of the general cause: the worst degree is when the blood-vessels in the pia mater burst, and the blood coagulating



agulating compresses the brain. Feeble horses, abounding with poor blood, are as subject to this disease as those with better.

Sometimes the following symptoms precede, viz. loss of appetite, feebleness, reeling, watery, turgid, and inflamed eyes, hanging down the head, or resting it on the manger; at the same time there is little or no change in the urine or the dung.

Sometimes young horses will rear up, and fall back, if handled about the head: in this case it is not so frequently mortal: If blows or wounds on the head, or if matter lodged on the brain, are the cause; beside the above-named symptoms, the horse will start and fly at every thing, particularly after feeding: in this case relief is very uncertain. When a horse falls down suddenly, works violently at his flanks, and though plentifully bled: yet continues unable to get up, his recovery is hardly to be expected.

The speediest relief is to bleed freely, but in proportion to the age and strength of the horse; and as the quickness of the discharge contributes much to the relief, it is adviseable to strike the veins in several parts at once; while the horse is bleeding,

ing, raise his head and shoulders, and support them with straw.

As soon as the fit is over, give a purge with aloes, and immediately follow it with a strong purging glyster; repeat this glyster every night and morning till all danger seems to be over. Once a day half a drachm of the powdered leaves of asarabacca may be blown up his nostrils; it will promote a discharge from the head, and afford some relief; to finish the cure, give some cooling attenuating perspiratives every night and morning for a week or ten days. The following mixture will be both an agreeable and a useful one for this purpose.

Take two ounces of wild valerian-root, coarsely powdered; pour upon it a pint of boiling water; let them stand until the liquor is cool enough to drink: then strain it off, and dissolve in the clear liquor two drachms of crude sal ammoniac. Let the whole be given for one dose.

The above method of cure is for horses with plenty of rich blood; but if the horse abounds with poor, watery blood, he should be bled very sparingly, if at all; but with all possible speed give him a strong purge, immediately following it with a glyster; and let diuretic medicines  
be

be joined with cordials and given twice a day. The following will be useful for this end.

Take crocus metallorum, finely levigated, half an ounce; assafoetida, three drachms; and oil of amber one drachm; beat them up with a sufficient quantity of the cordial-ball, for one dose, which may be washed down with a hornful of the infusion of valerian-root as above directed, but without the sal ammoniac; or, instead of the valerian, other bitter stomachic ingredients may be used.

The custom of putting hot stimulating medicines into the ears, is a practice that is very injurious. Doctor Bracken is of opinion, that a pain in the ear is sometimes the occasion of an apoplexy. But during exercise it may not be amiss to wrap a little assafoetida, or any other nauseous ingredient, in a rag, and fasten it to the bit, for thus a salivating will be occasioned, which, in some degree, may prove useful.

It frequently happens with young horses that, from a fullness of sily blood, plentiful feeding, and the want of due exercise, they will reel, or fall down suddenly; but they are easily and soon relieved by bleeding. A fit of this kind may be  
caused



caused simply by rarefaction, as is sometimes the case when the weather is extremely hot, or when a horse hath been violently exercised: in these cases the horse seems to recover as if from a sound sleep. Fits of this kind may be also caused by full feeding, as on the first two or three days after turning a horse into plenty of grass, his head being constantly hanging down, and his stomach full, the circulation through the brain is retarded, and he falls down suddenly as though he was dead.

### A S T H M A.

The asthma is either moist or dry: the moist, is when there is a free discharge of matter by the nostrils in consequence of coughing; the dry, is when the cough produces little or no discharge.

The moist asthma is a cough that proceeds from a load of phlegm, or of slimy matter, discharged into the vessels of the lungs, occasioning difficulty, and sometimes great oppression in breathing: it is manifested by the following symptoms: the flanks have a sudden and quick motion; the horse breathes short, but not with his nostrils open, as is observed in  
horses

horses that are feverish or broken-winded: he first wheezes some time and rattles in his throat; then he coughs; and this cough is sometimes dry, at others it is moist: he frequently snorts after coughing, and throws up gobs of phlegm through the mouth or nose; and after drinking he frequently does the same; he also does the same at the beginning and ending of his exercise: this discharge gives him considerable relief. Some horses wheeze so excessively, and are so extremely short-winded that they cannot easily move until they have gently exercised for some time in the air; though after that they will go through their work to admiration.

This moist asthma should carefully be distinguished from that purfiveness and thick-windedness which fall or foul feeding occasions; also from the same symptom when it is occasioned by a want of exercise, or taking up a horse from winter-grass; in which cases the former is cured by a decrease, and the latter by an increase of feeding.

Asthmatic complaints, whether the moist or the dry, are usually tedious and obstinate; but if the horse is young, and the disease not of long standing, a recovery

very is sometimes brought about. The exercise should be moderate, and in open air; the diet should be sparing, for, in all diseases of the lungs, a full stomach renders the oppression greater: their hay should be of the best sort, always sprinkled with water, given in small quantities, and the oftener in proportion, as there is less at one time: their corn and water should be managed with the same care.

If the horse is full of rich blood, bleed freely, and repeat the operation as often as the oppression and the difficulty of breathing may require: if his blood is poor, proportionably less should be taken away; and unless the case is very urgent bleeding may be omitted.

Give over-night a bolus with two drachms of calomel, and next morning the following purging-ball.

Take one ounce of aloes; of gum ammoniacum, assafoetida, galbanum, and oil of aniseeds, of each two drachms; treacle, enough to make them into a ball.

This bolus and purging-ball may be repeated at due distances of time, and on the days free from purging give every morning one of the following pectoral balls.

Pectoral



## Pectoral Ball.

Take of the cordial-ball, half an ounce; of powdered squills and Barbadoes tar, (or, in its stead, the common balsam of sulphur) of each two drachms; make them into a ball for one dose. Or,

Take gum ammoniacum, assafoetida, galbanum, and liver of antimony, of each two ounces; fresh squills, enough to form a paste; which make into balls of from one to two ounces each, according to the greater or less violence of the disease.

The dry asthma, called also the nervous asthma, is a cough, proceeding from some irritation on the nerves in the membranous part of the lungs and midriff; but there is not any thing discharged by it except a little clear water from the nose, notwithstanding the violence of the cough, and its continuance when once begun, which for some time is almost incessant: the coughing fits have no regular return; they are more frequent when walking than in other exercise, except when suddenly stopped after hard riding, &c. on which occasions the cough is very troublesome; after drinking it is troublesome too: and a change of weather will  
some-

sometimes make it very teasing for two or three days; but it is generally worst in a morning. Sometimes, when no particular circumstance occurs to disorder the horse, the cough will be seldom heard for a week or two together. And yet, though this cough is so teasing, the horse eats heartily, hunts, and performs his business very well, if he is tolerably treated, he keeps a good coat, and maintains most of the usual signs of health.

At eight years of age the dry asthma commonly makes its appearance. The cough may begin at four or five, and at times be very violent; but at eight, and after, he labours with his flanks, and that in the greatest degree after feeding: he hath now an almost constant working of his nostrils, and a motion with his fundament; after which it usually terminates in broken-wind or in death.

Bleeding in moderate quantities is more or less necessary, according to the strength of the horse, and the difficulty of breathing; after which give the following bolus at night, repeat it the next night, and on the morning following work them off with a proper purge.

The

## The Preparative Bolus.

Take calomel, two drachms; and honey, enough to make a bolus.

In eight or ten days repeat one bolus at night, and the next morning repeat the purge.

During the operation of these medicines, it is necessary to keep the horse well cloathed and littered: and he should be well supplied with scalded bran and warm water.

After the second purge, give one of the following balls every morning, letting him fast two hours after each, and continue their use for two months, or longer.

## Asthmatic Balls.

Take antimony, finely levigated, half a pound; gum guaiacum, four ounces; myrrh and gum ammoniacum, of each two ounces; Venice soap, half a pound; honey or treacle, enough to make a mass, of which two ounces may be taken for one ball. Or,

Take gum ammoniacum, fresh squills, and Venice soap, of each four ounces; anisated balsam of sulphur, one ounce;  
make



make them into a mass, of which two ounces may be made into a ball.

If the disease be obstinate, the bolus with calomel may be repeated at proper intervals, with or without the purge, taking care that it does not salivate.

On dissecting horses that have laboured under the dry asthma for some time, the heart and the organs of respiration appear somewhat enlarged: which preternatural enlargement is an effect of the continual labouring with the breath, and not the cause of the disease.

#### BACK-SINEW RUPTURED.

The back-sinew, called also the tendo Achilles, when broken through, the two ends being brought together, and the limb secured so as to favour a reunion, a compress, and bandage dipped in vinegar must be applied; particularly take care to apply a splent on the fore-part of the foot, so as that it cannot be moved forward.

Some farriers stitch the divided ends of the ruptured back-sinew, but the machine invented by Mr. Clover, of Norwich, renders this operation unnecessary: it is made of a thin iron plate, concave on the side next the leg, and is fastened over the usual bandages by means of leather straps, which are joined to iron bows, fastened to the pillar by screws. See Plate III. fig. 1.

E

BARBS.

## B A R B S.

Barbs are small excrescences under the tongue, which are easily seen by drawing it aside, and cured by snipping them close off, and washing the mouth with salt and water.

## B L O O D - S P A V I N.

The blood-spavin is what in man is called a varix; it is a dilatation of a vein, and usually happens on the inside of the hock, occasioning a weakness, or a small degree of lameness.

If in the beginning it cannot be put a stop to by astringents and bandage applied upon it, open the skin over the dilatation, but a little farther both ways; then pass a crooked needle with a waxed thread under the vein, both above and below the swelling; make the ligatures secure, and leave the swelled part to digest away with them, dressing the wound once a day with the digestive ointment.

## B O N E - S P A V I N.

The bone-spavin is a boney excrescence on the inside of the hock; it is produced by the same matter which nourishes the bones, or that forms the callus when they have been broken.

It is caused sometimes by a bruise on the part, but most frequently by straining, in consequence of loading young horses

horses more than they can well bear, or by riding them hard.

If a bone-spavin adheres to the bone of the leg, it is hardly possible to remove it by any method in practice; but if it does not firmly adhere, and only lays upon the bone, endeavours may be used with success. If a spavin appears on a horse arrived at his full age, strength, and growth, the cure is less probable than as if he was yet a colt, or not full grown; and in old horses a cure is very rarely performed. If a spavin proceeds from some internal cause, the difficulty of relieving will be much greater than when it proceeded from blows, or other externals. If the spavin is seated on the lower part of the hough, it is less dangerous than one that is higher: and a spavin near the edge is not so bad as one in the middle, for that hinders the bending of the hock.

A fullness on the fore part of the hough from a bruise, is not always a true spavin; it is often only a thickening of the skin, or of the membranes covering that part: in this case, as well as when hard riding, or other straining, is the cause of such swelling or hardness, it may be treat-



ed at the first with repellers, as in case of a bruise or a strain.

When there is a real spavin, the method of relief is either by blistering, or by fireing; but in colts and growing horses, as the spavins on them are more superficial, the mildest methods should be preferred, though their effects be much slower.

When blistering is used, the following ointment and method are well adapted to succeed.

#### Blistering Ointment.

Take of the stronger blue ointment, three ounces; of Flanders oil of bays, one ounce; cantharides, three drachms; sublimate\*, one drachm; mix them well together. Or,

Take cantharides, euphorbium, and sublimate, of each one drachm; Flanders oil of bays, one ounce; mix.

Cut away the hair quite close, as far as the spavin extends, and lay one of these ointments pretty thick over the part, then, with a sticking plaster, and other proper bandage, keep it carefully on, let it con-

\* Also called white corrosive mercury.

tinue until the discharge lessens, and when the scabs fall off, apply the ointment again in the same manner as at the first; thus, and without any more trouble, colts and young horses are generally cured.

An old standing spavin may require the ointment to be repeated five or six times, or more; though, after the second time, the repetition should not be oftener than once in two or three weeks, lest a baldness be produced on the part.

In full-grown, and old horses, this disease is difficultly remedied; for the matter of it is harder, and runs more into the joints; which situation renders the application of means very difficult; however, as success sometimes attends even the use of the milder method, it is best to try the ointment above directed, for some months, permitting the horse to work in the intervals of the application.

The caustic kind of blisters, and firing are used; and, indeed, some bold adventurers succeed sometimes with them, where superior skill, under the direction of prudence, fails: but, notwithstanding this, their more frequent ill effects, by exciting pain, inflammation, &c. should render us very cautious in their use.

If the spavin lies deep, and runs into the hollow of the joint, and the ointment above is not effectual; fireing is preferable to the caustic kind of blisters, and may be thus conducted.

Take a cautery, formed somewhat like a steam, with this the swelling must be penetrated, and the part kept running by the blistering ointment. Thus, with due perseverance, there will be few spavins of this sort that will not give way, and, at last, entirely dissolve and be discharged.

### B O G - S P A V I N.

The bog-spavin is a soft humour on the inside of the hough. Dr. Bracken says, that it is a collection of brownish gelatinous matter, contained in a bag, and thinks that the matter is the same with that which lubricates the joints, and that the bag is formed of the membrane that includes the joint: he says, that he was first convinced that the matter was in the joint, by pressing the tumour on the inside of the hough, and immediately discovering a tumour form itself on the opposite side; on observing this, he cut through the teguments, and discharged a large quantity of gelatinous matter; dressed



dress'd the wound with dossils dipped in oil of turpentine, putting into it, every third or fourth day, a powder, compounded of calcined vitriol, alum, and bole: thus the bag sloughed away, and the cure was completed without a scar.

If firing is necessary in this case, and generally it is, the bag must be penetrated, or it will soon fill again, and the whole operation must be repeated. If, through the operation or other means, pain or inflammation should come on, foment the part twice a day, and apply a poultice over the dressings until these symptoms are removed.

### B R O K E N - W I N D.

A small degree of broken-windedness is called pursiveness. Many pursive horses have several of the signs of broken-windedness, yet never become broken-winded, if not ill used or neglected; such are the great and foul feeders, which are always thick-winded; and, except their diet and exercise be carefully managed, they will easily become broken-winded.

Due care being taken, as to the diet and exercise of pursive horses, according to the directions below for the broken wind-

ed, tar-water, to the quantity of one or two pints, or two large spoonfuls of Barbadoes tar may be dissolved in the yolk and white of an egg, then mixed with a pint of warm ale, may be given in a morning fasting, two or three times a week, particularly when hunting or other exercise is intended.

Broken-windedness from an internal cause, or from any cause in the constitution, makes its first appearance in horses at about eight years of age. A narrow chest, disproportioned to the size of the lungs, is by many considered as the chief natural cause; and the reason why this disorder is not manifest earlier is, that before this eighth year, a horse is not at its full growth and strength: in the sixth year he ceases to grow taller, after which his body increases more in bulk, and every part having arrived to its full growth, the lungs and the midriff are subjected to more pressure.

In horses, the midriff is the most active and the most effectual part that assists in breathing; and in dissecting such as have been long or violently broken-winded, this part hath been found greatly relaxed, and thin, and its tendinous parts very feeble. The lungs, the heart, and its  
bag,

bag, have been found exceedingly enlarged, and appearing more fleshy than is common, and very often without any other alteration or defect; no other parts discovering the least deviation from what is natural: to this fleshiness and enlargement of the lungs is attributed the slowness with which a broken-winded horse takes in his breath, and the suddenness with which it goes from him again.

But, besides this disproportion betwixt the cavity of the chest and its contents, there are various other causes, such as violent colds, hard riding, strong exercise on a full stomach; any means that can determine a great quantity of blood to rush through the lungs, foul feeding, and also full feeding when a cough already attends.

The signs of a broken-wind are, a drawing in the breath, and pinching in the flanks, both with a slow motion, then letting them go again suddenly, the breath forcing itself through the mouth and nostrils, with such violence, that a person in the dark may discover this disease very often by holding his hand before the horse's nose; a frequent wheezing and rattling; and if very bad, he coughs more or less violent, particularly after  
E 5 drinking



drinking cold water; sometimes the nose runs; the glands about the throat swell; his nostrils and fundament are constantly working; he frequently farts: very often, before any of these symptoms appear, or the horse is suspected to be disposed to this disorder, he hath a troublesome dry cough; eats his litter, or other improper food, and drinks large draughts of water.

It is sometimes difficult to distinguish betwixt a fresh cold and a broken-wind; but in the latter, on every motion, or trotting briskly for a few minutes, you will observe a very frequent difficult and short breathing, with a hissing, whistling sound, and the flanks heave more than in colds; add to this, that the cough is not so deep in broken-windedness as from a cold, but it is rather a short tickling cough, like one caused by irritation in the wind-pipe, though, in fact, its seat is in the lungs, in which are often found little tumours full of water, and sometimes only of wind.

Horses, from their prone position, are more liable to purgiveness and broken-wind, than men are to asthmas and phthisic, to which the two first seem similar; for, in horses the intestines press  
much

much against the midriff, whereas, in man, while he is erect he is free from this inconvenience.

This disease rarely admits of more than of a palliative cure, in order to which, care in the diet and exercise are of the first importance.

Great care is required in exercising and feeding purfive and broken-winded horses; the exercise should be gentle and moderate, as to its continuance; the food should be always the best of the respective sorts, given in small quantity and oftener in proportion, that the stomach may never be full. All dry food, such as corn, hay, bran, &c. should always be moistened with water, to prevent thirst; and as to hay, its flavour is improved by this means; more corn should be given than hay where it can be afforded; what hay is given should be clean and sweet, being well shook, and moderately sprinkled before it is given: be careful too not to make the hay wet; for then the horse will not eat it. When there is a convenience, these horses are best when kept out all the year at good grass that is not over plentiful, his corn being continued as when he stood at hay: and if he is at grass, he should never be taken up, ex-

cept to be used ; for, if taken from grafs to dry meat, they are more oppreffed in their breathing, for want of air and moift food. On the other hand, if the pasture is rich and plentiful, the ftomach, by being constantly full, will increafe the difeafe. If convenience cannot be had for constant running in the field, the horfe may be foiled with green barley, apples, pears, tares, or other herbage that can be beft obtained, and kept in a place that is not very clofe.

By care in this method many horfes have been much relieved, and made ufe-ful for many years : when during the firft year they would not bear much labour, relief hath been manifef in the fecond ; and fometimes at the third year's end, it has not been eafy to perceive any remains of the difeafe, and they have gone through all reasonable fervice with alacrity.

Befide care in eating, drinking, and exercife, fome affiftance is to be looked for from medicine : and firft, according to the ftrengh, bleeding may now and then be ufed.

The night after bleeding give the following bolus. Take two drachms of calomel, and make it into a bolus with honey :



ney : and next morning give the following purging-ball.

Take aloes, six drachms ; gum galbanum, ammoniacum, and assafoetida, of each two drachms ; saffron, one drachm ; with treacle enough to make a ball.

This bolus and purging-ball may be repeated at proper distances according to the urgency of the symptoms.

On the days on which the purging-medicines do not operate, give an ounce, or an ounce and an half of the following every morning.

#### Balls for Broken-winded Horses.

Take gum galbanum, ammoniacum, and assafoetida, of each two ounces ; powdered squills, four ounces ; saffron of antimony, two ounces ; and honey enough to make it into a paste, which may be formed into balls when used.

Now and then give the following to promote a discharge by urine.

Take half an ounce of nitre, and two drachms of sal ammoniac ; dissolve them in a small quantity of water, and when the horse is thirsty, give it to him to drink, having first mixed it in a pail with  
a larger

a larger quantity of water, but not more than he will drink at one time.

Garlic is very beneficial, and may be thus given: if the horse will eat it with his corn, give him a large head in each feed; if he will not take it thus, slice, or bruise two or three ounces, and infuse it in a quart of boiling milk, until it is cool enough to be given. Let this be given for one dose, every second or third morning fasting.

Sometimes this disease is so violent, that, at times, the horse can neither eat or drink for want of breath. In this case give him all the air that is possible; take away blood pretty freely, and repeat the operation as it may seem needful. Sometimes this fit will continue several days; during which time his food may be scalded bran, which at night may be laid in his manger, and a little good hay may be laid upon clean litter also, as, perhaps, he may prefer the litter to the hay. If the weather is hot, give him every night and morning two or three quarts of water-gruel, for at noon he will hardly be able to swallow, the heat rendering the breathing so difficult. When the fit is off (and not before) give him the medicines above directed, and ride him gently now  
and

and then, always leaving him to his own pace, and permitting him to stop at times to take breath. When he is recovered, if kept out at grass and properly managed, he may work very well until the fit returns, which, perhaps, may not be for many months; and if due care hath been taken, the returns will be generally less violent.

If a broken-winded horse is to be sold for a sound one, observe the above directions for exercise and diet, as long before shewing him as you can; then, two days before he is shewn, feed him very sparingly, and that wholly with oats and beans; let him have but a little water, and in the morning give him a quart of warm new-milk, in which put four ounces of the best sweet-oil, first mixed with two or three eggs: move him about a little to make him dung: thus his flanks will seem quite easy, and he will not rattle in his nose.

### B U L I M I A.

The bulimia, or hungry-evil, is caused by acid and ill-flavoured crudities. In some strong horses, worms will cause this disease, though they take away the appetite in weak ones, Horses naturally sub-  
ject



ject to it, are weak and soon tire with exercise.

In order to the cure, the diet should be mucilaginous, for such food is most difficultly digested, and best takes off the uneasy sense of hunger.

Absorbents, gentle purges, and stomatic medicines are the most proper to carry off, and to prevent the crudities that give rise to this disease.

When horses eat clay, &c. their keeper may be assured that acid crudities in their stomachs are the cause of their doing so; therefore, instead of hindering them, chalk, or burnt hartshorn, should be given them to eat.

### C A N K E R.

It proceeds from frushes ill managed, for the most part, though various other causes may produce it.

If the hoof seems to affect any of the cankered part, so much must be cut away as produces the inconvenience, and the rest should be softened as much as possible with linseed-oil, or other greasy matter.

The cure consists in destroying and keeping down proud flesh until the foal grows again: this is effected by rubbing the

the fungous flesh with oil of vitriol, or with butter of antimony, &c. every second or third day, as the occasion may require. Due purging and diuretics, as directed for the grease, will be proper here to divert the humours from the frog.

There is also a canker in the mouth, which is a number of white specks at the first, but they soon degenerate into ulcers, which are cured by the following lotion.

#### Lotion for the Canker in the Mouth.

Take white vitriol, one ounce; dissolve it in a pint of water, and with this wash the mouth two or three times a day.

#### C A P E L L E T S, &c.

Capellets are a sort of wens, growing on the heels of the hough and on the point of the elbow: they proceed sometimes from bruises, &c. The vessels in animal bodies are capable of extension and of dilatation, when there is a continual addition of fresh matter; hence tumours with small beginnings may increase to a very large bulk.

When

When these swellings are observed in their beginnings, they should be rubbed with resolvents and repellents, such as vinegar, or a mixture of vinegar with spirit of wine and camphor.

But if they grow gradually, on both heels, &c. an internal cause may be suspected; such as an error in the blood, or other juices; a rupture of some vessels; and an extravasation of the juices: in this case endeavour to bring them to a suppuration, which, when effected, the matter may be discharged with a lancet.

We may here except such as seem filled with water, and have very broad bases; the first will very often disappear without any aid, or with simple repellents; the latter, if they do not already tend to suppuration, are better left alone, as they are very apt to return when the cause is internal.

## C A T A R A C T S.

Cataracts are also called moon-eyes, and lunatic-eyes. About the age of five or six, the symptoms of a lippitude come on; they continue to come and go while the cataract ripens, which is usually two years; at this time all pain in, and running



ning from the eyes abates, and the horse goes blind.

Sometimes the cataract forms itself without any preceding lippitude; it is then called a dry cataract: in this case the eye is not shut up with the swelling, but it appears cloudy, and the horse cannot see very distinctly.

Sometimes the eye appears sunk, and as if it was wasting; then the cataract is usually a long time in forming, and the other eye, for the most part, continues good, though in all other instances, when one eye goes, the other soon follows.

Cataracts are of different-colours; some are whitish; others are of a pearl blue; and sometimes they have a greenish cast. To discover this disorder before it is ripe, lay your finger on the eye-lid, and rub it over the eye; then immediately look into the pupil, and the cataract will seem to have lost its place.

The cataract once formed is never cured, except depressing or extracting it be called a cure; but this operation hath not yet been attempted on the eye of any horse. This disease consists in a thickening or opacity of the membrane of the crystalline humour, by which the rays of  
light

light are prevented from passing so as to answer the ends of vision.

All that seems possibly useful towards a cure, is when the lippitude begins to discover itself, to remove it with all possible speed, and by every preventive method to guard against its return.

## C O L D S.

When, by being exposed to cool air, a check is given to perspiration, a horse is said to have taken cold; the consequence of which will be various, according to its degree, and the peculiar constitution of the animal.

A cold is the source of fevers, and, indeed, is in itself an imperfect one; it produces coughs; it greatly affects the lungs, and the salivary glands: the ears, the mouth, and the throat are also greatly affected by it; the daily discharge through the skin being in some degree put a stop to, the vessels are surcharged, and the parts least capable of resistance, will necessarily be the most injured.

The causes of colds are very various, and equally obvious, so need not be named. Young horses, when they are breeding their teeth, particularly when the  
rushes

tushes are cutting, are more subject to take cold than at any other time.

When a horse hath taken cold, he soon coughs; his appetite fails; he is heavy, and dull; his eyes water; the kernels about the ears and under the jaws swell; his nose runs, and he rattles in his breathing: according to the degree of the cold, he becomes more or less feverish: and if, with some degree thereof, his mouth is slimy, and his ears and feet cold, a dangerous fever is threatened; and if the eyes run, the brain is supposed to be affected.

Sometimes a horse has had a cold a long time before it is known that he is ailing. To know whether the cold is fresh or of long standing, feel between his jaws; and if the glands about the throat are free from swelling, the case is recent. The same conclusion may be made if he rattles in his breathing, or if, when he drinks, the water comes through his nostrils more than usual.

If the cough is strong, and he snorts after it; if the appetite does not fail much; if he moves briskly; dungs and stales freely; if his skin feels kindly, and his coat looks well, there will be no danger.

Slight,



Slight, and beginning colds are carried off by care in feeding, dressing, and exercise, with a few warm mashies of bran given now and then to keep his belly a little open; two ounces of nitre, or an ounce and an half of sal ammoniac, may be powdered and strewed in the mash: for a free discharge by perspiration, or by urine, contributes powerfully to relieve in these cases.

If the disorder seems to increase, take away some blood, and repeat the operation according to the strength of the horse: if he grows feverish, treat him as directed under the article FEVER. If he is costive, give an emollient glyster, in which a little nitre is dissolved; and when he begins to eat, and to snort after coughing, exercising him moderately every day, will hasten recovery.

Warm cloathing about the head and neck is particularly useful here, as it promotes the running at the nose: this discharge is increased too by the warm water which is always given him to drink, and by the warm mashies which for this end should be put into the manger rather hotter than he can eat them, in order to his being, as it were, fumigated with the steam

steam ascending from them, before it cools.

It should be well attended to, that when a horse hath a cold, cough, or other disease, attended with a discharge at the nostrils, great care is necessary to keep him clean. Horses do not cough the phlegm up by the mouth, as it is common with men, but pass it all by the nose; in consequence of which they throw it about, making every thing nasty that is near them: in all such like cases, give them their hay well shook and sprinkled, and but in small quantities at a time, for his breath will spoil it so, that sometimes it will sicken him and beget a dislike thereto: when he is not eating, put a little straw into the manger, to catch the phlegm that he throws about by coughing; and also, that by taking away the straw the manger may more easily be cleaned, which should be done every time he is fed: be careful too, to clean his nose well every time that he eats or drinks. Horses are naturally clean, and nice to a great degree; and in these diseases their recovery depends so much on their being kept clean, that these directions cannot be too much enforced.

When

When the signs of a cold or of a cough attends, but without feverishness (after due bleeding, and a purge or two), give one of either of the following balls every morning, to promote perspiration, but, if any degree of fever attends, avoid all warming medicines.

### The Pectoral Ball.

Take of the fresh powders of aniseed, elecampane, caraway-seeds, liquorice, turmeric, and flower of brimstone, of each three ounces; of liquorice-juice (dissolved in water, enough to make it of the consistence of honey), four ounces; of the best saffron, in powder, half an ounce; of sweet oil and honey, of each half a pound; of the oil of aniseeds, one ounce; and of wheat-flour, enough to make the whole into a paste. Of this paste balls may be made about the size of a pullet's egg.

### Dr. Bracken's Cordial Ball.

Take aniseeds, caraway-seeds, the greater cardamom seeds, of each one ounce; flower of brimstone, two ounces; turmeric, one ounce and a half; saffron, two drachms; liquorice juice (dissolved in a little water), two ounces; oil of aniseeds,



seeds, half an ounce; liquorice powder, one ounce and an half; wheat-flour, enough to make the whole into a paste.

These cordial balls are an improvement on the long famed Markham's Ball.

### C O L I C.

The colic is also called the fret, and the gripes. This disease is of three kinds, viz. The flatulent, or windy; the bilious, or inflammatory; and, the spasmodic, commonly called the dry gripes.

The signs of the flatulent, or windy colic, are a frequent laying down, and sudden rising again, as it were with a spring; often striking the belly with the hind-feet, and stamping with the fore-feet. In proportion to the violence of the gripes, there will be convulsive twitches, which will make the horse turn up his eyes, and stretch out his limbs, as if he was dying: the ears and the feet are hot and cold alternately; and in the same manner, hot and cold sweats succeed one another: a frequent striving to stale, and often turning the head to the flanks; then  
F falling

falling down, rolling, and turning sometimes upon his back : these last symptoms are occasioned by the strangury, which is often increased by a load of dung in the rectum, which may be suspected, when he often strives to stale and dung, but with difficulty, or without effect.

Cribbing horses are subject to this disease, from their habit of sucking in air : it is caused also by permitting horses to drink cold water when they are hot, without exercising them properly after. Colds become a cause too, when the perspirable matter is thereby determined into the bowels : but, however caused, the general method of cure will be the same.

Immediately give one of the balls prescribed hereafter for the strangury : that done, empty the rectum as directed under the article GLYSTERS : this will make way for the wind ; and, by taking off the load from the neck of the bladder, the urine will have liberty to pass off. Where the urine is suppressed by a load on the rectum, diuretics are necessarily hurtful. Before that impediment is removed, as soon as the rectum is emptied, rub the fundament, and a little way in the rectum, with soft-soap : thus you will farther assist the discharge of urine.

Bleeding

Bleeding is adviseable, at least when the horse is strong; but always open the neck-vein, and omit the useles and cruel custom of cutting across the bars in the mouth.

While the above is performing, a carminative glyster may be prepared, or a glyster may be given of the fume of burning tobacco, with which the bag may be filled from the shank of a pipe, the head being held in the mouth of him who blows the smoak. As soon as the bag is full, tie it; and proceed as with any other sort of glyster.

#### A Carminative Glyster.

Take two handfuls of camomile flowers, two ounces of aniseeds, half an ounce of long pepper; boil them a few minutes in five pints of water; then pour off the liquor, and add to it a quarter of a pint of olive-oil, and one ounce of common salt.

If by this time the horse does not discharge much wind or urine, both the ball and the glyster may be repeated, and a drachm of the salt of amber may be



added to the ball; and in the same manner repeated as there may be occasion.

When the horse is able, walk him about; but take care not to fatigue him.

2. Balls for the Strangury in the Wind Colic.

Take juniper berries, and Venice turpentine, of each half an ounce; salt-petre, one ounce; oil of juniper, one drachm; salt of tartar, two drachms; treacle, enough to make a ball; which may be washed down with a decoction of juniper-berries.

The bilious, or inflammatory colic, called also, gripes, is attended with most of the symptoms of the flatulent colic; but hath also great heat, and much fever; a panting, a dryness of the mouth; now and then a little loose dung is discharged, with a hot water, that is blackish or reddish, and hath a disagreeable smell.

This disease is violent, and admits not of delay. Bleed freely; and, if the symptoms abate not in a few hours, bleed again. Night and morning give an emollient glyster, with two ounces of nitre dissolved in each.

Beside

Beside plenty of gum arabic water for his drink, give him, every two or three hours, a pint of the following purging-drink, until several loose stools are procured.

Gum Arabic Water ; called also White-water.

Dissolve four ounces of gum arabic in a quart of water, and mix it with the water which the horse drinketh, in such proportions as may seem to be necessary.

#### A Purging Drink.

Take of senna, three ounces ; Glauber's salt, four ounces ; infuse the senna in three pints of boiling water, for half an hour ; then to the strained liquor add the Glauber's salt.

If the symptoms do not give way very soon, but rather increase, the case becomes desperate ; and if the hot, ill-coloured, stinking water appears, a mortification is begun, and death is at hand. In this case give a pint of a strong decoction of the bark ; with a quarter of a pint of red wine, every three or four

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hours ;

hours; and every night and morning give the following glyster.

Dissolve two ounces of Venice-turpentine in the yolks of two eggs; then gradually mix with it, a quart of a strong infusion of the bark in water, and a pint of red wine. Give this for one glyster.

To some horses of little value, the following hath been useful.

Diapente, one ounce; diascordium, half an ounce; myrrh, two drachms; oil of amber, two drachms; make a ball; and repeat it three times a-day.

The spasmodic colic, or dry gripes, is known by the horse's frequent motion to dung, but without effect; and the hardness of what little he can discharge; the almost constant and quick motion of his tail; the high colour of his urine, and his great restlessness. When he is very ill, he frequently lays down; rolls about; and gets up again in a hurry. He hath several other symptoms that attend the flatulent colic; such as convulsive twitches, turning up his eyes, and stretching out his limbs; and yet his motions



tions seem rather more sluggish in general.

Its most frequent cause is costiveness: the dung hardening and obstructing the bowels, it becomes acrid, and irritates them too; its viscidty detains the wind, whence the belly is distended; and by the quantity of the retained excrement, pressing against the neck of the bladder, the urine is detained, and a swelling is often occasioned about the fundament, and along the sheath.

From this account of the disease, it is evidently necessary to empty the rectum, by raking it with a small hand; and, immediately after that, an emollient oily glyster must be thrown up, and repeated night and morning; and the above purging-drink given as there directed, until the bowels are freed from their troublesome contents.

In all these sorts of colic, the diet should be scalded bran, the white-water, and water-gruel. When the symptoms abate, and the horse can eat a little hay, the best should be picked out for him.

As he can bear it, he should be carefully but well rubbed: cloathing should not be spared, and the litter should be in great plenty.

If the horse hath freedom from the violence of his symptoms one hour, the danger may be supposed to be at an end: but during the fit, he should be attended by one person, at least, and that constantly, to prevent him injuring himself: this holds good in all the species of this disease.

It is common to give hot medicines in all colic complaints; but they are only proper in the flatulent sort; and even there great caution is necessary in using them: for, beside the danger of rarefying the wind too much, they increase the disagreeable symptoms, by their stimulus on the neck of the bladder; and, in some cases, by rarefying the blood, and disposing the bowels to inflammation.

In common cases, to remove the gripes and pain in the bowels, caused by drinking cold water when hot; or from taking cold after hard exercise, a cordial-ball may be given with a drachm of camphor, and forty drops of the oil of juniper well mixed together. Or,

Take Venice-treacle, two ounces; soap-pill, two drachms; camphor, half a drachm; small-beer, two pints: mix them together for one dose; and keep the horse warm for forty eight hours.

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## COMPRESSION of the FLESHY SOAL.

The fleshy soal of the foot, is considered as an expansion of the muscles and tendons thereof; and accidents, too slight to fracture the bone, or to rupture the back-sinews, may occasion a compression of this fleshy soal, by making the coronary bones push the fleshy soal against the horny one; the consequence of which will be, that the inflammation will extend itself to the ligaments, tendons, and capsulæ of the joints, occasion a stiff joint, and so render the foot entirely useless. And, as in every motion the coronary bones are put in action; and the nut-bones, with the back-sinews, are thereby affected, every bad symptom will necessarily be aggravated, and expedite this fatal event, if speedy preventives are not made use of.

This compression is thus: the coronary pushing against the nut-bone (upon which it partly moves), which having the action of a lever, takes for its point of support the upper and fore-part of the foot-bone compressed: the nut-bone, which it raises,



and which pushes against the back-sinew, occasions this sinew to press the fleshy foal against the horny one.

A strong compression is discovered by pushing the thumb upon the coronet, which occasions an acute pain. If the compression is not considerable, it cannot be discovered at the coronet, but must be examined in the foot, by paring the horny foal very near to the frog, till it bends under the tool ; then press the tool gently upon that part ; and, if the horse is sensible of much pain, by so doing, it is certain that there is a compression of the coronary upon the nut-bone.

The cure is, either by dispersing the inflammation, by the use of repellents, &c. or by drawing the foal. Though the latter method is generally preferred, yet, by far the greater number are cured by the former, which is thus :

Pare the foal to the quick ; let him bleed freely at the point of the foot, then dress up with the oil of turpentine, and apply an emollient poultice all over the foot ; and round the coronet ; fomenting well at each dressing with some strong discutient.

But

But in very bad cases, drawing the foal is not to be neglected, and the sooner the better, as the fleshy foal is thereby immediately relieved from pressure, the space in the hoof is enlarged, the circulation becomes easy, and the free use of the foot is recovered. When this operation is performed, the foot should be suffered to bleed, that all the parts of it may be duly emptied; then dress it up with the digestive ointment, and rub the hoof well with grease.

If the compression hath been long, the foot will not bleed much when the foal is drawn, and the two foals will seem to adhere somewhat closely; for the compression intercepts the fluids, that otherwise would freely circulate between.

## C O N S U M P T I O N.

The seat of the true consumption is the lungs; it begins there with hard knots, which, increasing, occasion a cough: these knots suppurate, and at length burst, and are formed into ulcers, which discharge a matter that causes all the most disagreeable symptoms, and renders the case incurable. The same sort

of knots, and the same progress of them in the mesentery, forms what is called an atrophy.

The symptoms of a consumption are a difficult breathing, and, by fits, a sharp cough; frequent sneezing, which sometimes cause a groaning; a dullness and watryness of the eyes; the ears and feet are almost always hot; the flanks move quickly, and seemingly uneasy. Sometimes there is a running at the nose, and generally a discharge that way of a yellowish, toughish matter: the horse sweats greatly with very little exercise; he hath but little appetite to hay, though a good one for corn; after which the heat greatly increases. At times, these symptoms almost vanish; but, with the least extraordinary degree of exercise, or error in feeding, they return; so are better and worse until death puts an end to the whole. Some horses look sleek, though the flesh is continually wasting; others have a rough coat, and appear as if they were surfeited. On dissecting horses that have died consumptive, the soft fat is all consumed; but none of the harder or suety, which is yellower in proportion as the horse is leaner when he died.

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The above symptoms are attendant on horses when there is a considerable abscess in any of the bowels.

When a thick yellow matter is discharged from the nose, the horse growing very thin, sweats greatly, the flanks heave with a redoubled motion, the cough short and rattling, there is no hope of a cure. If the horse is young, the matter of a whitish colour that is thrown out at the nose, or when it is watry, and only appears now and then, and not constantly, the prospect is more favourable, and encourages to the use of means for relief: though, however favourable the symptoms are, recovery is uncertain; a relapse is easily produced; and a natural weakness, out of the reach of art, is for the most part an attendant.

Hot, fiery horses, that are very active at the first starting, but that soon tire, are the most subject to this disease.

The hard knots in the lungs may lay quiet a long time, occasioning no other disturbance than the dry cough; and if they can be dissolved without suppuration, a cure will be performed. To this end bleed in small quantities; one, or at the most two pints are enough at one time; and repeat it according to the oppression  
in

in the breathing. Pectoral medicines may be occasionally given to palliate present symptoms, but the hard knots can only be dissolved by mercurial and antimonial medicines.

Take two drachms of calomel, mix it well with half an ounce of the conserve of roses, and give it the last thing at night : repeat this bolus as often as you can without salivating or purging ; and, if a moderate evacuation by the anus be wanting, give a gentle purge, at proper distances, as need may require.

Every morning and evening give the following powder, to the quantity of an ounce, or an ounce and an half, for each dose.

Take saffron of antimony, finely levigated, gum guaiacum, and nitre, of each equal parts ; make them into a fine powder.

The diet, if in the house, and particularly when taking the mercurial bolus, should be the best and the sweetest hay, with mashes of bran ; and the horse must be kept dry ; but good air and grass is better. Avoid low, damp grounds, and a rank grass : a high and dry common is  
the

the best : but the best of all is to turn him into a salt marsh ; there he will need no other food, medicine, or care, but what will depend upon himself.

That sort of consumption called an atrophy, is attended with but little cough, no running at the nose, and no appearance of a hectic fever : but the flesh wastes, and the horse grows proportionably hide-bound. The nature of this disease is the same as that of the consumption ; and the cure, both as to time and manner, is the same. Also, in either case, if a cure is performed, it must be while the disease is in its infancy, and before the hard knots have any tendency to suppurate.

### CONVULSIONS.

Perhaps the most frequent cause of convulsions in horses, are the bot-worms in the stomach ; and this cause may be most suspected if the disease happens in April, May, or June, and before the horse is six years old ; or if the horse hath been lately bought of a dealer ; though if a bot is seen in the dung, the cause is out of all doubt. But there are various other causes, such as blows on the head ; wounds on tendinous parts ; internal ulcers ;



cers; and, indeed, almost any thing that can greatly affect the nervous system. Pain in any part of the body will, by sympathy, produce this disease, which, in some tender subjects, hath frequently only costiveness for the cause: however, be the cause what it may, when it is discovered, the convulsions will be the best relieved, by treating that cause as the disease to be remedied.

Convulsions rarely attack at once, without some previous and manifest indisposition; when they approach suddenly, and at the season, or with the circumstances in which bot-worms usually appear, you may positively conclude those vermin to be the cause: the cramp, indeed, sometimes occasions the sudden seizure of a convulsive fit; but all other causes give notice of indisposition one way or other, before the convulsive attack.

Young horses, before they are six years old, are most subject to convulsions, particularly draught-horses of all sorts more than saddle-horses.

The symptoms of convulsions from bots, are much the same as those attending the STAGG-EVIL (which see), in which case, if possible, before the mouth is shut,

shut, get down a dose of mercurial physic, such as is directed against bot-worms.

That sort of convulsion which begins in the limbs, and gradually becomes general, having its cause in some bad quality of the blood, is soon relieved by cordials and attenuants.

### C O S T I V E N E S S.

Horses that are naturally of a costive habit, often work the best; and, as they rarely suffer thereby, they seldom require any assistance from medicine: however, they may be allowed plenty of sweet bran, and mashes of bran and barley, now and then given, with an ounce of Epsom salt mixed in them. If scalded barley is given, let the horse drink the water in which it was scalded.

### C O U G H.

A cough is called dry, when it is without any discharge by the nose; and it is called moist, when such a discharge attends.

A cough is often the effect of other diseases, ill managed: in this case it is habitual,

habitual, and often degenerates into an asthma, or produces a broken-wind. If it proceeds from tubercles, or from hard knots in the lungs, or from an abscess there; it is not very troublesome when the horse is at rest, but when he is at any exercise it is very teasing. If the cough proceeds from the liver, it is a short, dry cough; the flanks will perpetually work; the mouth, lips, and eyes, will appear yellowish, the dung will be whitish, and the urine high coloured: thirst is frequent; yellow clouds are often perceived in the eyes, and a general langour and indolence is observed. In this case, if the cough is of long standing, or if an abscess is formed in the liver, a cure is hardly to be expected. A cold obstructing perspiration through the skin, and determining it in too great abundance to the lungs, or to the glands of the wind-pipe, by its irritation is a cause of coughing. Worms often excite a cough: and the teeth, particularly the tushes when they are cutting, generally do the same.

A dry cough is not always a bad symptom, particularly when it is caused by a cold in narrow-chested horses, and is not of long standing; though it is acknowledged



ledged, that if a dry cough continue long after the common symptoms of a cold, it strongly indicates other infirmities; more especially if there is a great loss of flesh and strength, a consumption is threatened.

For the cure of coughs in general, see the article *ASTHMA*.

If teething is the cause in young horses, bleeding, according to the violence of the disease, and the strength of the horse, is necessary; and give, now and then, a warm mash.

If worms are the cause, their destruction is the cure of the cough: and so of any other disease causing a cough, the removal of that disease is the cure of the cough.

Several circumstances in the management of coughs may be seen under the article *COLDS*.

### C R I B - B I T I N G.

Crib-biting, called also, cribbing, and the tick, seems to be a habit common among young horses, rather than a disease; it is oft occasioned by uneasiness in breeding teeth; sometimes the cause is their being ill-fed when they are hungry. Many young horses wear away their fore-teeth

teeth so much, that they will not meet: some horses that have used themselves to this habit, will catch the side of the manger between their teeth, will suck in the air, and swallow it until they are fit to burst: they generally look lean and jaded; they seldom chew their food properly; their coats stare; they are soon fatigued with exercise; and are much subject to gripes and other disorders from wind.

The best method of cure, is the preventive method, viz. When a young horse is observed to begin with this practice, let him stand by a wall, where there is no manger; and lay his hay on the ground: as to his oats they may be always given in a bag.

### C R O W N - S C A B.

The crown-scab is a discharge of a sharp humour about the coronet, frequently destroying the hair; and the humour drying there, forms a scab.

Dress with the digestive ointment, and give a purge, which repeat two or three times; and on the intermediate days give a diuretic ball every morning.

### C U R B.

## C U R B.

A curb is produced by the same causes as a bone-spavin; it is of the same nature too, but hath its seat on the opposite side of the same bone: the spavin is on the fore part, and the curb on the hind part of the hough: it sometimes runs both on the inside and outside of the leg; and usually extends itself from below the heel of the hough downwards.

It is sometimes attended with stiffness and pain. It is generally cured by blistering, as directed for the bone-spavin: if it does not give way to this method, but increases in hardness, fire it with a thin-edged iron; making several deep lines running downward, or, rather, in a penniform manner; then apply the blistering ointment to dissolve and discharge the tumour.

## D E A F N E S S.

The custom of cutting away the hair out of horses' ears, in order to make them look better, subjects them to cold, and is frequently the cause of deafness for a time.

## D I A-



## D I A B E T E S.

A diabetes is, when a horse pisses thin and pale urine, and that frequently, and in greater quantity than is proportioned to what he drinks. If this disease continues, it soon proves fatal; and, indeed, it is rarely cured; for the horse soon loses his flesh; his appetite decreases; his strength fails; and death speedily ensues. It may be noted, that some young horses, when they are first backed, piss themselves through fear, and pass a great quantity; but in this case gentle usage is all that is requisite.

If a cure is attempted (which sometimes is successful in young horses) let the food be dry, and such as requires the least water; as mashes, and corn sprinkled with water; and what little hay is given should be of the best sort, and given often in small quantities, well sprinkled with water.

Make fresh lime-water three times a day: as soon as it clears, and before it cools, give a quart of the clear water each time, and every night and morning give the following.

Take

Take of Peruvian bark, finely powdered, an ounce and an half; roach alum, half an ounce; treacle enough to make a ball.

If these do not succeed, give a quart of alum-poffet, three times a day, instead of the lime-water.

#### Lime-Water.

Take of quick-lime, that is light and but lately burnt, one pound; put it into an earthen vessel, and pour upon it two gallons of water: let them stand until the lime is settled, then the clear water may be poured off, and must be kept well corked in bottles, if not immediately used.

#### Alum-Poffet.

Take a pint of milk, and two drachms of alum, finely powdered; boil them together until the curd is well separated; then pour off the thin liquor, which is called whey, or poffet.

Any other astringents, except alum, should not be freely used; for, by making the body costive, they increase the discharge by urine.

D R O P S

## D R O P S Y.

The dropſy is often called the water-farcy. It is of two kinds: the firſt, reſembles the anafarca in man, and is moſtly the conſequence of ſome ſorts of colds, or of a feveriſhneſs that hath been lingering a long time, and that hath been removed with difficulty. In this caſe the limbs will be greatly ſwelled, and ſometimes the whole body: but by a few ſlight ſcarifications, very little deeper than the ſkin, made on the inſide of the leg and thigh, on the loweſt part of the belly, the water will often be evacuated in twenty-four hours; after which, two or three purges, at proper diſtances, may be given; and, during the cure, a maſh of ſcalded bran ſhould be given now and then, with two ounces of the flower of brimſtone.

The ſecond ſort of dropſy, hath not the water confined to the belly and limbs, but it is in ſeveral parts of the body, and manifeſts itſelf by a faintneſs and indolence; want of appetite; difficulty of breathing, and change of the natural colour, as from bay to dun, from black to duſkineſs from white to an aſh colour,

&c.



&c. the hair sheds wherever it is rubbed, soft swellings in different places, which receive a lasting impression from the gentlest pressure of the finger. It is observable, that in dropsies, when a horse lays himself down, instead of gathering up his limbs, he stretches them out immediately.

This second sort of dropſy hath for its cauſe, a poor, bad food; fog-graſs, in cold rainy ſeaſons; and whatever can render the blood poor and watery: and its cure depends on the evacuation of the preſent redundant ſerofities, and to increaſe the warmth of the blood.

Give a purge every eight or ten days, and on the intermediate days give the following

## Diuretic Balls.

Take of nitre, two ounces; powdered squills, half an ounce; camphor, one drachm; honey, enough to make them into a ball; to be given every morning, and washed down with a pint of the following

### Diuretic Drink.

Take of the green bark of the elder-  
tree, and camomile-flowers, each one  
G handful;

handful; juniper-berries, bruised, two ounces; boil them in a quart of water for three or four minutes; take them from the fire; and, when cold, pour off the liquor; and add four ounces of antimonial wine.

If the case seems to require it, the drink may be repeated without the ball every night.

When the swellings disappear, and the horse is far advanced in his recovery, these medicines may be omitted, and the following may be given in their place, for a week or two, to confirm the strength.

Take zedoary and gentian roots, of each four ounces; centaury and camomile-flowers, of each an handful; juniper-berries, bruised, four ounces; iron-filings, half a pound; steep them in two gallons of good ale for a week, shaking the vessel once every day. Of the clear liquor give a pint every night and morning.

During the cure in both kinds of the dropfy, the food should be of the best and most nourishing kind: and an ounce of crude antimony, well levigated, should be given in each feed of corn.

## EPILEPSY.

The epilepsy is, by different authors, differently named, one calling it the falling sickness, another the falling evil, &c.

Epileptic diseases require the same treatment, in general, as the APOPLEXY (which see). But as it is sometimes not easy to distinguish the epilepsy from some other complaints, assistance to that end is offered as follows.

The epilepsy must be distinguished from convulsions, gripes, and the vertigo: they are often mistaken; one being taken for the other.

In the epilepsy, the horse reels, staggers, or runs round, and falls suddenly; his eyes are fixed; and often his jaws are so close set, that his mouth cannot be forced open: he is quite insensible; he stales and dungs without knowing it. One while he is motionless, except for the beating in his flanks, caused by the motion of the lungs and heart; his legs are stretched out as if he was dead. At another time he hath convulsive motions, and his limbs shake so violently, that he even breaks the pavement with his feet,



if he happens to fall thereon : sometimes, while the legs are stiff, the head and body are violently agitated. With these symptoms alternately attacking, the horse is frequently two or three hours affected (more or less), and then recovers ; sometimes, without any return ; at others, the fits are more or less troublesome, according to the success of the means applied for relief. As the fit goes off there is generally a foaming at the mouth ; the foam is white, resembling that of a healthy horse when he champs on the bit.

As to convulsions, they rarely approach suddenly ; and, in the few instances of their sudden attack, you will easily distinguish them from the epilepsy, by a little attention to the chapter on that subject.

With respect to the gripes, from whatever cause they arise, the horse is observed to be often up and down, rolling and tumbling about ; but in all his motions, there is a manifest design, which shews that he hath a sense of his pain, and that he endeavours to ease it ; and if he lays stretched out at all, it is but for a little while.

Epilepsies may be caused by blows on the head, violent exercise, too much, or  
too

too little blood, surseits, worms, or indeed, almost any cause that can affect the spinal marrow or the nerves; in all which cases the particular cause must be attended to, and treated as that particular disorder requires, when considered as the only disease.

## F A R C Y.

The seat of the true farcy is chiefly the blood-vessels of the skin and fleshy panicle. It runs along the veins and thickens their coats, so as to give them the appearance of knotted chords. At the first, a few small hard knobs appear in the veins; they are very tender and painful, if touched; they soon grow soft; and, breaking, discharge an oily, bloody water, soon becoming very foul ulcers.

The discharge, which is frequently made at the nose and mouth of horses thus affected, might probably injure any other that should be permitted to eat with him, at the same time, and in the same manger; but it is not so infectious as in the least to endanger those that are in any other, even the very next stall. The

sick of this disease, have often run and fed with sound horses, without the least ill consequence.

In some instances, a farcy in the legs and feet, hath been mistaken for the effect of some blow, so hath been called a humour; or, it hath been taken for the grease in the heels: but, in the first case, the swelling is sudden, and generally goes away very soon: the second, is a smooth swelling, that begins just above the hind-part of the pasterns; whereas the farcy, in this case, approaches slowly, and continues to increase: it appears, at first, on the fore-part of the pastern joint, with one, or but a very few knobs; others soon after appearing, but run upward like a knotty branch of a tree.

The usual distinction of species seems to be without foundation; but to view it in its different degrees, hath a useful influence in practice. The whole of the disease may be considered, first, as affecting only the small veins about the head and neck; secondly, as tainting the larger vessels, and spreading on the head, neck, flanks, and legs; thirdly, when a whole side is attacked at the first, and the other grows gradually like it.

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When the farcy appears, if it does not spread; also, when the knots grow loose and moveable, recovery is at hand: when confined to the smaller veins on the cheeks and forehead, the cure is easy; but sometimes difficult, if it spread about the eyes, nose, lips, and under the jaws; and the more so, if the neck-vein is full of knobs. Beginning on the outside of the shoulder or hip, the cure is not difficult; but if it begins on the plate-vein, and that vein swells, and is knotted, and the axillary glands are diseased, the cure is very tedious: and if the great vein on the inside of the thigh, and the parts thereabout are knotted, the difficulty is yet increased. If it begins on the lower part of the limbs, the uncertainty of the cure is still greater; and if a recovery is brought about, the limbs are so disfigured, that the horse is afterwards fit for nothing but drudgery. It is dangerous when it first attacks the spine, and more so, if the horse is in high, than if but in moderate condition. Dr. Bracken says, that when the farcy is in the kernels of the jaws, and about the roots of the ears, the glanders are threatened.

When the farcy is epidemical, if the knobs arise on various parts of the body at once, soon becoming very ill-conditioned ulcers, and there is a discharge of a greenish bloody matter from the nostrils, death soon ends the disease. The end is fatal too, when, notwithstanding the use of the best means, the disease continues obstinate; fresh knobs rise up, particularly on the back and loins. If the horse is hide-bound, and hath a running at the nose; if abscesses form themselves betwixt the muscles, on the fleshy parts; if he hath a frequent scouring, and the excrement is thin, and ill coloured; in these cases all art will fail—endeavours are needless.

In the first degree, the small veins on the cheeks and temples, are thickened and knotted; the eyes are sometimes inflamed, and there is often little knobs that are painful and tender, running along the eye-lids and the side of the nose, forming a circle round the edge of the nostril and the lip. It is not uncommon for the farcy to begin on the outside of the shoulder, or near the withers, or on the outside of the hip.

In

In these cases, the smaller vessels only are affected; and the disease being but superficial, it will easily give way to the following method.

Bleed, according to the strength of the horse, and the apparent violence of the inflammation, though, if he is poor, this evacuation will rather injure than relieve, and is never useful after the first onset of the disease.

Dissolve four ounces of cream of tartar, in a pint of water, by boiling them a few minutes; and, whilst hot, pour off the clear liquor upon half an ounce of fenna leaves; let them stand until they are cold; then give the strained liquor for one dose, and repeat it every second morning for a week, or until it begins to purge.

The belly being rendered soluble by the above, give the horse half an ounce of nitre every day, for three or four weeks, either mixed in a mash of bran, or dissolved in his drink, as he will best take it.

Night and morning rub the following repellent ointment well into the knobs.



## Repellent Ointment.

Take white-vitriol, two drachms; sugar of lead, half an ounce; oil of turpentine, two ounces; green ointment of elder, four ounces; mix them well together.

By this means the knobs are usually dispersed: but sometimes they break and run; and if the matter is of a good consistence, and there is a disposition to heal, lay aside the above repellent ointment, and dress with the digestive ointment, spread on tow, and secured in the best manner that the part will admit.

If any little lumps remain without hair, give two ounces of the liver of antimony in his corn every day, for a fortnight; then one ounce every day for another fortnight. Instances are very rare where the procedure fails to remove this degree of the disease.

In the second degree, the larger vessels are enlarged and knotted; the feet, the pasterns, and the flanks are affected: in this case, greater difficulty attends; but if you begin early with it the cure is more easy and certain.

In this, as in the former degree, begin with bleeding, according to the horse's strength; or, as before observed, bleeding must be omitted if the horse is poor; due care being taken, as above directed, to render the bowels lax. Let the knobs be rubbed well with the following liniment.

Liniment for the Farcy.

Take oil of turpentine, six ounces; drop into it, by a little at a time, three ounces of the oil of vitriol; the oil of vitriol will make the oil of turpentine very hot; for which reason the oil of vitriol should be added by very small quantities at a time, and a short space should be allowed betwixt one pouring of the oil and another. When the whole is mixed, let the mixture stand to be cold before it is used.

This mixture may be made with equal parts of the oil of turpentine and the oil of vitriol, when it is to be applied to the loose fleshy parts, as the flanks or the belly.

Wherever there is any swelling or knobs, rub them rather gently with a woollen cloth; and then, with a feather,

or other convenient means, rub in some of the above liniment, and repeat it twice a day.

After the bowels are made soluble, begin with the use of the nitre, as above directed, continue the liniment and the nitre until the knobs digest, and are nearly dissolved: and when the matter appears kindly, and the edges of the ulcers are free from all callosity, lay aside the nitre, and give the antimony as before directed. When the ulcers seem disposed to heal, apply the digestive ointment instead of the liniment.

Sometimes spurring on the side of the belly, or on the flanks, is the cause of this disease there. To distinguish a few knots of the farcy kind, from knots produced on the veins from any other cause, it may be observed, that those of the farcy kind are painful and smarting; the hair stands up like a little tuft on the knots; and if they discharge any matter it is of a greasy, and yet viscid quality. To remedy these, if you perceive them early, before any increase is made, apply a poultice of bran and vinegar, or verjuice, and renew it once every day: if proud-flesh arises, touch it with the oil of vitriol, or other caustic, just before  
each



each poultice is applied. In this case, the disease being local, externals are all that are needful; but if the knots spread, in consequence of a habit or constitution favouring their increase, rub them with the above liniment, until the matter is of a good quality, and the ulcers seem to heal; then bathe them with either of the following mixtures: and give an ounce of the saffron of antimony in the corn twice a day.

#### Discutient Mixtures for the Farcy Knots.

Take rectified spirit of wine, four ounces; oil of vitriol, and oil of turpentine, of each two ounces; verjuice, or sharp vinegar, six ounces. Or,

Take white vitriol, one ounce; dissolve it in four ounces of water; add to this, four ounces of spirit of wine, in which, half an ounce of camphor is first dissolved; and six ounces of verjuice, or sharp vinegar.

In the third and worst degree, which is when either of the other degrees, through neglect, or other causes, become inveterate; or, where at the first the disease appears on one side of the body,  
and

and soon spreads upon the other; in this advanced degree of the disease, the colour and other qualities of the knots and of the sores should be attended to, for sometimes they appear yellowish, are hardish or scirrhus about the edges, which proceeds often from the liver; in such case the disease in the liver must be attended to, or the cure will be frustrated. In case of this yellowish hue, give the following.

Take one handful of the root of sharp-pointed dock, sliced; one ounce of monk's rhubarb; of madder, turmeric, and liquorice root, of each half an ounce; boil them in three pints of water to two pints; then to the strained liquor, while warm, add two drachms of saffron, and one ounce of Castile-soap: give half of this at night, and the other half in the morning, until the yellowness in the knots begin to wear off.

If the knots look blackish, a mortification is threatened; and the bark must be given freely in forge-water.

If the means recommended in the second degree have been used without the desired efficacy, rub the knots, wherever there is any swelling, with the milder  
blue

blue ointment, to disperse them; but if they are already burst, dress the ulcers with the following:

Take quicksilver and Venice-turpentine, of each one ounce; mix well by rubbing them together until the quicksilver disappears. If the knots burst, and a proud-flesh fills up their orifices, destroy it with a little oil of vitriol; or, if the hardness of the skin hinders the matter from being discharged, open it with a small cautery, then dress them with the quicksilver and turpentine above-mentioned.

#### Mercurial Alterative Balls.

Take quicksilver, two ounces; divide it well with one ounce of Venice-turpentine; then add to it of diapente and gum guaiacum, of each two ounces; honey, enough to make it into eight balls, one of which may be given every second or third morning. Or,

Take antimony, half a pound; quicksilver, four ounces; flower of brimstone, two ounces; gum guaiacum, zedoary, and galangal roots, of each, two ounces; carui or coriander seeds, four ounces;  
make



make them into a paste with honey, and give three or four ounces every day.

In some cases, crude antimony given, to the quantity of two ounces, every day with the corn, is very effectual; but after each such dose the horse should be gently exercised an hour or more. In all diseases, indeed, when a course of antimony is in use, the exercise should be daily, but moderate; and it is of some importance that the feeding be very good of its kind; it should be nourishing and cordial, given in small quantities, and proportionably the oftener. Antimony frequently purges when given in large doses; this is prevented when given in small ones, and gradually increasing them; though sometimes a gentle astringent is required to be joined.

But above all other means, giving mercurials as alteratives, promises and indeed produces good effects. Repeated success hath attended the following in the worst cases.

Take turbith-mineral, twenty or thirty grains; Venice-soap, an ounce; make them into a ball to be given every other night for a fortnight; then rest a week, and proceed again in the same manner:  
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if it sickens or gripes the horse, or if it runs off by stool, add to the ball two drachms of philonum, or five grains of opium. If it salivates, desist immediately, and give a purge, and repeat it in seven or eight days after: when all appearance of the mouth being affected is gone, begin again with the turbith in lesser doses, and repeat them just so as to prevent its salivating.

It should not be forgot, that horses salivate more easily than men; probably by reason of the more open texture of the ducts of their salivary glands, and, perhaps, in part by the horizontal position of their guts retarding the passage of the mercury longer than it is in men: however, be this as it will, we must attend to the first appearance of salivation, and check it with all possible speed, otherwise the horse will be suffocated in a few days. A moderate degree of salivation cannot be kept up in a horse, so if not early checked, the vessels will presently be so turgid, as to prove destructive.

During the course, be very careful to keep him from cold: if he is a strong, fresh horse, he may loose three or four pounds of blood once or twice on the days that the turbith is omitted; walk him out  
half

half an hour or more, when the weather will permit; but when he comes in he must be well curried. If his mouth is tender, feed him with boiled oats, or boiled barley, or scalded bran.

After the use of the turbith is ended, he may have a quart of hemp-seed every day with his corn. Lime-water, with the water which is given him to drink; at the first mix them in equal parts, afterwards more and more of the lime-water until he will drink it alone.

The blue ointment, commended above, and in various other parts of this work, is made as follows, also the stronger sort.

#### Milder Blue Ointment.

Take of tried hog's lard, four pounds; of quicksilver, one pound; of Venice-turpentine, two ounces. Rub the quicksilver with the turpentine till the quicksilver disappears, then add the lard, and mix them well together.

#### Stronger Blue Ointment.

Take of tried hog's lard, two pounds; of quicksilver, one pound; of Venice-turpen-



turpentine, two ounces; mix them as directed for the milder blue ointment.

## F E V E R S.

A simple fever, a fever with inflammation, intermittent, the low or putrid, with the hectic, include all the fevers that affect the body of a horse. Whatever other names may be given, on the right management of all, according to this distribution, depends the happy issue.

The presence of a simple fever is known by unusual heat all over the body, but not that parchedness peculiar to inflammatory fevers: the veins are turgid; the horse is watchful and restless: these symptoms are occasioned by the rarefaction of the blood. If he is in the field he moves about perpetually, frequently drinking, but takes very small quantities; often smells at the grass, and that in different places, but seldom eats any; he is very nice: if he is in the stable, he moves about from one side of the stall to the other, frequently smells at every part of the rack but seldom picks a bit of hay. A redness or inflammation appears in the eyes; the tongue is dry; the breath is hot and disagreeable to the smell; the  
appetite

appetite is very dainty, and often quite gone: this symptom may happen in any species, yet is more peculiar to this simple fever; it is the constant effect of a distention of the blood vessels in the stomach, from plethora or from rarefaction there; this distension of the vessels in the stomach occasions loss of appetite, nausea, or sickness, according to its different degrees, and is the reason why, though a horse is so very thirsty, he drinks but little at a time. He frequently dungs in small quantities, and it is generally in small and hard bits. The urine is high coloured, usually discharged with some difficulty. The pulse is full and hard, beating fifty times or more in a minute; his ears and feet are unusually hot; there is a beating in his flanks from the fullness of the vessels in general, though in some other fevers it is occasioned by a defect of spirit, which, at the same time, occasions insensibility and listlessness, rather than restlessness so remarkable in the simple fever. Some horses, that at other times are very quiet, will now shrink, or strike if any person comes near them, particularly if they touch their back or loins; this symptom is occasioned by the distension of the aorta, which lies there  
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very much unguarded. Many mistake this symptom for the sign of a swayed back.

Fevers with inflammation. See INFLAMMATION of the PLEURA, &c.

The intermittent fever is known by a coldness and shivering, with great indispotion to action, followed by great heat and thirst, ending with a plentiful sweat: when all this is ended, the horse feeds, and performs any exercise as if free from disease, until such another fit attacks him again, which may be the next or the second day after.

The low, or putrid fever, called also the irregular depressed fever, is a lesser degree of the malignant putrid sort. The heat is seldom great; there is a great depression, languishing, inactivity, and dullness; the horse seems often to have a great heat within, while outwardly he is cold to the touch: and sometimes heat is equal and universal, but never in a great degree; nor does the heat arrive at any distinct crisis, but coming on gradually, it goes off insensibly; mean while nature seems to attempt the relieving herself, sometimes by one secretion, sometimes by another, but not perfectly by any. There is a languidness and moisture in the eyes,  
the



the mouth is never parched, and it is very rare that any sense of thirst is observed; the appetite is but indifferent; he perhaps eats a mouthful or two, then gives over, as if fatigued with it, for a while chewing, he moves his jaws very languidly, and with a disagreeable grating of his teeth; his dung is usually soft and moist, but not often greasy; sometimes his urine is but small in quantity, at others it is profuse; it is generally pale, with little or no sediment; and, indeed, such is his dejection that he hangs his head, and takes but little notice of any thing or person that comes near him: if he offers to walk he reels, and often quivers and shakes.

In the hectic fever the signs are much like those of the simple fever, only that in the hectic fever feeding always increases the heat for a while, and seems to mend the spirits of the horse; but still he cannot bear any exercise without suffering greatly thereby; he is easily fatigued, his flesh is flabby, and, though he stands in the stable, he breaks out at times in copious sweats, that dispirit him greatly. It is very rare that any service is done where this fever is attendant, for its general source is a diseased liver, or an ulcer  
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in the lungs. If it depends on some other disease, on the removal thereof the fever will of course subside, but otherwise all attempts have hitherto been in vain.

The diet and management will be nearly the same in all sorts of fevers; and, in general, the following rules, if attended to, will be found useful. Let them have a very little hay at a time in the rack, but always the best that can be picked out; if the hay is given out of the hand the horse will sometimes eat, whereas without such care he would not: kindly horses particularly require to be so fed. Oats are to be avoided; but bran, either scalded or sprinkled with a little water, if fresh and sweet, may be frequently given in small quantities. It is a bad custom in these cases, to force warm water on horses, it often creates a nausea and loss of appetite; if he will drink warm water, or warm oatmeal-gruel that is very thin, he may, but if he prefers cold water let him have it, for the cold often removes a nausea and restores the appetite; it should also be given as often as he pleases, though not in full draughts. The cloathing may be the same as in health, for fevers in horses do not go off

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as in men, by great sweats, or by any other increased evacuation, but gradually abates by means of a strong perspiration; indeed, when the kernels about the head and neck are swelled, these parts may be kept a little warmer, as by this means a discharge at the nose is increased, which is very salutary. Here it is necessary to caution against the practice of some who syringe the nose, and thereby produce other swellings in the adjacent parts. When a horse begins to recover, carefully avoid over-feeding him, for by such a practice obstinate relapses or surfeits are produced; to increase the quantity of his food only as his strength increases, will prevent ill effects and produce the advantages required.

There is good reason to expect a speedy recovery, when the fever is observed to abate, the mouth is less parched, the grating of the teeth is not much heard; when the horse begins to eat, and lay himself down; if his skin feels kindly, and his eyes seem lively. But, if the appetite does not mend, or if it declines, and if the heat continues, the case is dangerous. When there is a running at the nose, it is generally of a reddish or greenish dusky colour; it is thickish and clammy,



clammy, sticking to the hairs in the nostrils: now if this matter becomes clear and watery, it is a favourable sign; but if it continues thus viscid and ill-coloured; if the horse at the same time sneezes frequently; if the flesh is still flabby, and he seems hide-bound; if the weakness increases, and the joints swell; the kernels under his jaws are loose, and yet swelled; if he lifts up his tail with a quivering motion, the case is desperate indeed.

We will introduce the method of cure by a remark on the pulse and the method of feeling it; in general, it is observed that on a medium the pulse of a horse in health, whose circulation is unaffected by any accident, is perceived forty times in a minute, and that if in such a horse the number of pulsations increase to fifty, the heat of his body far exceeds the heat of a healthy state, or, in other words, he is in a fever. To discover the pulsations, lay your finger on the artery in the side of the neck, just above the chest, or feel for the arteries in the temples, or in the inside of the legs, particularly the fore-legs, and you will perceive them very distinct. The same end is obtained

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by laying your hand on the horse's side to count the motions of the heart.

In proportion to the degree of heat and the strength of the horse, bleed from three to six pounds, and if there is any apprehension of costiveness, give him a laxative glyster; after this, let him have more or less from two to four ounces of the following saline powder, two or three times a day, according to the violence of the fever, which in the inflammatory species often requires full doses; dissolve it first in three or four pints of water, then add it to as much more water as he will drink at once, and that either warm or cold, as the horse will take it best; if a little bran or barley-flour be mixed with this liquor, it will be less disagreeable.

#### The Saline Powder.

Take salt-petre, five pounds; salt of tartar, one pound; mix them well in an iron or marble mortar, and then put it up in a bottle well corked, to be used as required.

During the use of this, or of any other preparation with nitre, the horse should be

be permitted to drink at pleasure, for nitre, in order to being very useful, requires to be well diluted.

If by these means the horse begins in a few days to eat a little, this method alone will be sufficient, if care in nursing is not neglected: but if the appetite does not return, nor the fever abate, repeat the bleeding, and continue the saline powder as before directed; and if costiveness indicate, give the following

#### Laxative Cooling Drink.

Take of cream of tartar, and of Glauber's salt, each four ounces; dissolve them in a sufficient quantity of water for him to drink at one time.

As soon as by these methods he begins to eat, and the violence of the symptoms in general give way, though his flanks do heave, which will be the case several days after the abatement of all other symptoms, there will nothing farther be requisite, than to walk him gently abroad now and then in the day, and to allow him plenty of litter.

In case of violent inflammation with the fever, which is attended generally

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with pain or swelling, or both, in particular parts; the same method in general will be required as in the case of simple fevers, only the bleedings should be more plentiful, and, perhaps, oftener repeated; as also a more liberal use of the saline powder, and other cooling means. See INFLAMMATION of the PLEURA, &c.

The cure of intermittents will consist in a cautious use, or an omission of bleeding, according to the horse's strength: and during the intervals of the fits, to give an ounce of Peruvian bark, finely powdered, repeating it every four hours while the fit is absent. If the bark runs off with a lax, add to it a little diascordium, or other astringent, enough to check that effect; but, perhaps, after the first day or two it may not purge, so that except it continues to produce that effect, the astringents are best omitted. In case of any other species of fever intermitting, the same method may be used as where an intermittent is the original disease.

The low kind of fever rarely admits of bleeding, yet does not absolutely forbid it; great circumspection is here necessary, for symptoms which usually require this evacuation, will in this case

soon

soon give way, from the very nature of the disease: however, if the horse is young, and strong, if his vessels seem filled with a rich blood, two or three pounds may be taken away in the beginning of the disease, and may be repeated as the force of any inflammatory symptoms may indicate.

Whether the bleeding is used or not, give the following cordial saline mixture.

Take of crude sal ammoniac, two ounces; dissolve it in three pints of water; then add to it one ounce of Virginian snake-root, finely powdered, and three drachms of English saffron; mix, and give a pint three times a day, more or less, as the urgency of the symptoms may require.

If, notwithstanding this, the fever increases, the appetite grows less; if the urine is thin, pale, and frequently ejected; the dung changeable, as to moisture and dryness; if his gums seem red and spongy; if the coat flares; the case being now dangerous, give the following balls.

#### Compound Fever-balls.

Take of bark, finely powdered, one ounce; of Virginian snake-root, half an  
H 3                      ounce;

ounce; camphor, one drachm; honey, enough to make a ball; to be given with each dose of the cordial saline mixture; or with the following camphorated drink, according as the symptoms may require the one or the other. Or,

For horses of small value, the following balls may be substituted for the above-named.

Take of diapente and mithridate, each half an ounce; camphor, one drachm; make them into a ball, to be given every four or six hours, with a horn full of an infusion of snake-root, rue, and scordium.

#### The Camphorated Drink.

Take of camphor, one drachm; dissolve it in rectified spirit of wine, one ounce; add to it, gradually, a pint of distilled vinegar, and give half a pint for a dose, mixed with a pint of thin gruel, or of water in which a little bran hath been stirred.

If the horse is costive, laxative glysters should be given; though gentle and warm purges are rather to be preferred: if a purging come on, let it continue if it is mode-



moderate ; but, if it seems to enfeeble him, add gentle restringents, such as disacordial to his drink ; or, if needful, add more powerful remedies.

In this sort of fever a horse often stales with great difficulty, and his spirits are thereby much depressed. In this case prepare his drinks with fresh made lime-water, which should be clear, but retaining as much of the heat as possible, that is excited by the addition of the lime to the water. If, notwithstanding this, the urine is still defective, so that the body or limbs begin to swell, give the following diuretic drink.

Take nitre, one ounce ; Venice-turpentine (dissolved with the yolk and white of one egg), half an ounce ; then gradually add a pint of a strong decoction of marsh-mallow leaves, or of parsley roots ; let this be given for one dose, and repeat it every four or six hours, until the urine flows freely.

## F O U N D E R.

When there is great pain in one or more of the feet, so that the horse cannot easily touch the ground, but draws himself up on every step he takes with

H 4

the

the foot, or feet affected, he is said to be foundered. The seat of this disease is the ends of the tendinous fibres which are inserted into the upper part of the coffin-bone.

In order to the cure, the foal must be drawn, and then the upper part of the hoof must be cut out, enough to prevent its pressing against the tendons that end on the coffin-bones: add to this, the hoof should be cut through, from the top to the bottom, in five or six places.

## F R A C T U R E S.

Fractures of the coronary and nut-bones are both incurable; for could they be so secured as to unite, the fracture being in the joint, a stiffness would remain, so that the horse would be useless, as all their articulations are in motion in all exertions of the foot.

Mr. la Fosse warns us to observe, that the lameness generally thought to be in the shoulders, hips, or haunches, is in the foot, occasioned either by, first, a compression of the fleshy-foal from the coronary-bone: secondly, a rupture, or fracture, or strain of the back-sinew, called the tendo Achilles: thirdly, a fracture

fracture of the coronary-bones, which sometimes will be broke into three pieces; in this case the back-sinew is sometimes ruptured near its insertion, and the coronary bone broke into three pieces without being dislocated, which seems to be occasioned by the three ligaments (with which the coronary-bone is joined to the pastern and foot-bone), retaining each their part, and favouring the division according to their own number: fourthly, a fracture of the nut-bone, which always suffers this accident when it happens to the coronary-bone: fifthly, a fracture of the foot-bone. And any of these accidents may be the result of seemingly slight causes, such a false step, a sudden start, &c. Sixthly, bad shoeing is often the cause of lameness that is supposed to have its seat elsewhere.

Among the variety of causes, the different position of a horse's foot, whether he is loaded or not, may occasion different fractures in the bones there; but as the knowledge of the cause conduces little or nothing to the relief of incurables, we will proceed to shew how a fracture on these parts is discovered.

A fracture in the coronary-bone is observed by taking hold of the lower part



of the foot, and as you raise it you must bring it forward, at the same time pressing with a finger on the coronet, by which you will perceive a rattling; but if the back-sinew is not ruptured, this rattling is very obscure, and requires the nicest attention.

A fracture in the foot-bone is the only one that hitherto hath had its cure attempted, except by Mr. Clover, of Norwich, to whose ingenuity the public are indebted for the machine of here proposed, in order to the cure of fractured legs. It is made of thin plates of iron; that which he had, weighed only two pounds and three quarters, when fitted for use: it was made for a horse of fifteen hands and an half high, whose hind-leg was badly broken, but was cured, so that he returned to work in twelve weeks.

A G and B H, the two chief supporters of the leg, are made of such length as to reach from the knee of the fore-leg, or hough-joint of the hind-leg, to the parts of the shoe marked *i* and *κ*. A G being made thin and concave to receive the fore-part of the leg; and B H flat and stronger, especially from *n* to *h*, in order to support the weight of the horse, with-

without bending at *n*, where a thin plate is affixed on each side, suitably concave to receive the fetlock-joint, which effectually prevents the turning of the machine to either side. The circular parts *c d* and *e f* are made thin, and turned back about an inch, at the ends *o p* and *q r*, for the convenience of introducing the screw-pins, and fixing them to the necessary degree of tightness. The other circular part *s t* will be sufficiently secured by a small leather strap, with a buckle. In each longitudinal plate several screw-holes should be made, between *b* and *n*, *a* and *x*, the better to fix the bows, *c d* and *e f*, in the most convenient and necessary parts; and the upper one being covered with something soft, may be placed in such manner under the knee, or hough joint, as to receive a portion of the horse's weight, and in some degree prevent the ends of the fractured bone from pressing too hard upon each other. When the whole machine is put together, the end *h* goes through the hole of the shoe *k*, and by a screw is fastened to the heel, marked *m*, which may be made higher or lower, at discretion; and the end *g* is to pass through *i*, in the part *l z*, turned up from the toe of the shoe

to the top of the coronet of the foot, where it is to be secured with a screw, through the holes G and L; by which means, and by the screws at C, D, E, F, and T, the whole may be put together, or taken to pieces, with very little trouble. The pillar A G is concave on the side next to the leg.

### F R U S H.

The frush, called also the running-thrush, is a gathering in the frog, or an ulcerous disposition that sometimes quite destroys it; frequently there is a great moisture on this part which admits of cleaning, but of no drying or repellent applications. As it is only a salutary discharge, this must carefully be distinguished from the scabby and ulcerous state that constitutes the frush.

If a swelling appears, immediately pare away all the hard and decayed parts about it, and wash the whole frog with cold chamber-lye. If, through neglect, or the violence of the disease, the flux on the part is violent, there is danger of a canker; in which case wash with the following.

Take of rectified spirit of wine, and the sharpest vinegar, each two ounces;  
tincture



tincture of myrrh and aloes, one ounce; of Ægyptiac ointment, half an ounce; mix them well together.

After washing the part with this mixture, dip a pledgit of tow into it, and secure it in the best manner you can.

During the use of this, it will be necessary to give a purge once in six or eight days, and in the intermediate days the diuretic medicines proposed for the GREASE (which see).

### G I G S.

Gigs, called also bladders, which they resemble, grow chiefly about the lips in the mouth; sometimes they are found on the palate: they require no other management but to slit them open, and then wash them with salt and vinegar. Sometimes they degenerate into the CANKER (which see).

### G L A N D E R S.

The glanders have been called the murrain, and the mourning of the chine.

Mr. la Fosse was the first who wrote any thing satisfactory on this subject; and it is very little that hath been done  
by

by way of improvement since his publication. He describes seven sorts of glanders, though, in fact, there is only one. In almost every disease attended with a discharge by the nose, he calls that discharge the glanders. The six false species here follow, and then we proceed with that which only is the true.

The first of the false species is what some have called the pulmonary glanders. In this case purulent matter is discharged from ulcers in the lungs, and passes through the nostrils (for horses never pass their discharges of morbid matter through the mouth, as men do in coughing, &c. but always through the nostrils): this matter is whitish, and sometimes appears in lumps mixed with a thinner part.

The second hath been called the wasting glanders: it is also a discharge of whitish, mixed with yellowish matter, through the nostrils; but it proceeds from the lungs, generally happening at the decline of diseases brought on by over hard labour.

The third called the strangle glanders, is only a symptom of the strangles, in which disease a bad kind of matter is  
thrown

thrown upon the lungs, and after that is discharged through the nose.

The fourth, called the farcy glanders, is also a symptom of that disease, arising from an acrid humour falling on these parts.

The fifth, is no other than the discharge which is common on taking cold.

The sixth, is a discharge from the strangles, without first affecting the lungs.

But all these can only be considered as symptoms of diseases; and for their cure are referred to the cure of that disease to which they respectively owe their rise.

The seventh, or the true glanders, is a local disease: its seat is in the membrane lining the partition on the inside of the nose, the cavities of the cheek-bones, and the sinuses in the forehead above the orbit of the eyes: these cavities are full of a viscus matter; the membranes are inflamed, thickened, and spread with ulcers, which often destroy the subjacent bones. In all other respects a horse may be entirely in health, at the same time that he is glandered to a considerable degree.

The matter discharged is various; it is white, yellow, green, streaked, and sometimes tinged with blood; and, if the bones



bones are foul, it is of a dark colour, and foetid: there is always a swelling of the glands under the jaws: these glands do not, as in men, open themselves into the mouth, but into the nostrils; if one gland only is affected, the discharge is only from one nostril; if both, both nostrils receive the discharge. It is said to be infectious, but experience does not manifest this; the sound and the sick of this disease have run in the same field, and have lodged in the same stable, without the least sign of injury: however, there is prudence in keeping them from eating in the same manger together, as the matter from the nose of a diseased horse may make another sick, if he chance to take any of it with the corn.

Violent colds, a translation of febrile matter, or whatever can cause inflammation in these membranes, may cause the glanders. While there is no disagreeable appearance in the matter, you may hope for a favourable issue; but if it becomes gluey, if the inside of the nose seems raw, or is of a lead colour, or if the matter is bloody and stinking, there will be but little reason to expect a recovery.

The nature, and the seat of the disease, pointed out, the method of cure will the more easily be traced.

In

In its approach, we may attempt to prevent it, by fumigations or with injections : as in case of taking cold, if, after a discharge from the nostrils, during two or three weeks, the glands under the jaw becomes harder or larger, though as yet the glanders is not formed, it may be expected. In this case bleed, and proceed in general as in removing a cold, and gently throw up the nostrils the following by means of a syringe.

#### Emollient Injection.

Take linseed, one ounce ; camomile flowers, a handful ; boil them gently for a few minutes in a pint and a half of water ; then strain off the liquor, to be used three or four times a day, as warm as can be admitted, without injuring by the heat. If this procures not an abatement of the discharge, in ten or fourteen days, use lime-water, or the following

#### Restraining Injection.

Take roach-alum, one ounce ; dissolve it in a quart of lime-water, and add of sharp vinegar, half a pint.

Purges, diuretics, and perspiratives, should not be neglected but freely used,  
one

one or the other, according to the discretion of the prescriber. Three or four pints of a strong decoction of guaiacum chips in water, may be given in a day, and continued for some time: and rowels may be early made use of; as the more speedily we divert the humours, the more easily the cure will be effected.

If the disease is so far formed that ulcers are suspected, and if they are seated within the reach of a fumigation, the following hath been found beneficial. Take a heater, or an iron plate, hot enough to make the fumes of whatever is laid upon it ascend: lay upon it myrrh, frankincense, or mastich, or cinnabar of antimony, then cover it with a funnel inverted, and hold the pipe of the funnel under the horse's nostril so as to direct the fume up his nose.

But if the disease hath advanced to any considerable degree, the operation is the best method, indeed the only one by which to expect success. This operation consists in trepanning upon the part where the ulcers are seated; and if this is done before the bones are become carious, the application being then made immediately on the parts principally affected, a cure is completed in three or four weeks; but  
if,



if, after trepanning and examining with a probe, the bones underneath are found carious, the best step is at once to destroy the horse.

By examining the figure here inserted, the parts where the operation may be performed will be easily known. Having made the perforations that are necessary, inject therein half a pint of the following two or three times a-day.

Take of balsam capivi, one pound; dissolve it with a sufficient quantity of the mucilage of gum arabic, then gradually mix with it two gallons of lime-water.

Before the trepanning instrument is applied, a circular piece of skin should be cut out, with the membrane which covers the bone, about the size of a half-crown piece, otherwise the instrument will cause great pain by tearing it away, and will also be clogged before it comes to the bone. The instrument used by surgeons for perforating the skull, is the most proper here: it is made and used as a cooper's wimble is, except with some difference in that part which penetrates the bone.

## Explanation of the Figure.

From A there are sinuses which communicate with each other all the way down to the nostrils. Here the frontal sinus begins, and descends to about the middle of the large ring marked c, where the maxillary sinus begins and descends to B.

c The place most convenient for applying the trepanning instrument, for here you may inject both the frontal and maxillary sinuses, from the last of which the injected liquor will pass through the nostril.

D Another perforation should be made here for the glanderous matter to run off at. In many cases it is probable, that this opening alone, by giving vent to the matter, would effect a cure; at the same time the injection might be passed up here if the way was clear, which, when it is not, may easily be made so, by passing a stileto or a sharp-pointed rack there, and pushing it up the maxillary sinus to break the thin boney partitions, which, in some horses, divide it into two or more parts. In making this lower opening, incline the instrument toward the nose to avoid operating on the teeth.

To

To prevent the perforations from healing up before the ulcers are cleansed and healed, put a cork, well waxed, into the upper orifice, and keep the lower orifice (which is less than the upper one) from closing, by a lead pipe through which the matter may continually discharge itself. If, notwithstanding these cautions, the granulations shoot out too fast, rub them with a caustic, and also touch the edge of the bone therewith; thus, by obliging them to exfoliate, the healing will be duly prevented.

## G O N O R R H Œ A.

The gonorrhœa is also called the colt-evil, the shedding of the seed, or the mattering of the yard. It is a continued stiffness of the yard; but that which is usually called the colt-evil, is a swelling of the sheath, in which case, if the swelling is considerable and much inflamed, bleed, and give a cooling purge, apply a poultice of scalded bran to the part, and foment with an emollient fomentation as oft as the poultice is renewed. If there is any excoriation on the part, it may be dabbed with lime-water, and let the swelling be suspended by a proper bandage.

When



When there is a discharge of seed dribbling frequently from the yard, plunge him every morning into cold water, and give him the following ball every night and morning.

Take Venice-turpentine, one ounce; make it into a ball with a sufficient quantity of bole armeniac.

If this suffice not, and ulcers in the urethra are suspected, inject a little of the following up into it two or three times a-day.

Take balsam capivi, one ounce; dissolve it with the yolk of an egg, then gradually add to it a pint of lime-water.

Some colts get a habit of rubbing their yard against their belly until they shed their seed; for this there is no cure but castrating.

## G R A V E L.

Where this disease is suspected, if there is much heat or pain, bleed, then give the turpentine glyster, and let the horse drink water, in which parsley roots or marsh-mallow roots are boiled, and every night and morning give the following drench.

Take

Take balsam capivi, one ounce; dissolve it with the white and yolk of an egg; then add to it sweet spirit of nitre, two drachms; and half a pint of white wine.

If the pain seems very great, give forty drops of liquid laudanum in the drench that is given at night.

### G R E A S E.

This disease may have for its cause, first, a relaxation of the vessels about the heels; or, secondly, a redundance of poor blood; or, thirdly, they may both exist at the same time; or, fourthly, it may be a symptom attendant on, or the consequence of, other diseases: in which case the cure will depend on the removal of the disease on which it depends.

In the first case, the disease being local, external applications, with moderate exercise and care in dressing, will suffice. As soon as the heels are observed to swell, the horse in other respects appearing healthy, immediately clean them, and wash them with vinegar, and repeat this after each time that he is rid out. In slighter cases, this, with proper rubbing, will do: if the vinegar suffices not, use the following

Repel-

## Repellent Wash.

Take of lime-water, a pint; of rock-alum and white vitriol, each an ounce.

Some use a laced stocking, which may be made of strong canvas that will not stretch: this stocking should be nicely fitted to the leg, and kept on moderately tight, by which means the enfeebled vessels will be supported until they recover their tone.

Sometimes there will be cracks in the skin about the pasterns: these cracks are sore, and discharge a thin humour which lodges sand and dirt; and sometimes these cracks form themselves into scabs: when these are observed, clip the hair there as short as possible, spread a thin pledget of tow, with the digestive ointment, and apply it to these cracks and scabs; over this pledget lay a poultice of bran, scalded; and renew the pledget every morning, and the poultice every four or five hours; continue these until the swelling abates, and the cracks, &c. are disposed to heal: then, instead of the ointment and poultice, wash the part every day with the above repellent wash, and keep on a tight stocking until the strength of the part is confirmed.

In



In the second and third cases, where an internal cause, or an union of the external and internal join in producing the same effect, the cure is much more difficult. If the horse is gross, and of a full habit; if his legs are greatly swelled, the hair upon them start off, or, as is usually said, is pen-feathered, and there are sores that discharge a disagreeable matter, the blood in this state of the disease being very poor as well as redundant, bleeding must be avoided, for it would still encrease the poverty of the already impoverished blood, and its excess is best removed by warm purges, and diuretics on the days when the purges are not operating. A rowel under the belly will hasten the cure.

The following is a proper purge.

Take of Succotrine aloes, an ounce (or ten drachms); salt of tartar, half an ounce; ginger, one drachm; treacle, enough to make a ball: if it be necessary to quicken this dose, add to it two drachms of jalap powder.

Repeat this purging ball every eight, or at the most every ten days, and on the days free from purging, give one of the following every morning.

I

Diuretic

## Diuretic Balls.

Take of Venice-soap and yellow rosin, each half a pound ; salt of tartar and nitre, each two ounces ; oil of juniper, half an ounce ; beat them into a paste, and give two ounces, or more, every morning, making it first into a ball.

Instead of these balls, two ounces of nitre may be given every day, allowing plenty of water with it ; where it agrees with the stomach, it answers very well, but as the blood in this disorder is poor and cold, and the whole habit of body needs every assistance that can contribute to its recovery, the above balls are the most adviseable, and would be much improved as strengtheners, if to each dose you added half an ounce of the filings of iron, or rusted iron in powder.

If the legs are extremely full, foment them twice a-day with a fomentation made with bay-berries, wormwood, and camomile flowers ; an ounce, or a little more of each may be allowed for a gallon of water, to be boiled together for a few minutes ; and if the sores be very foul, dress them with the cleansing ointment, spread on pledgets of fine tow, large enough to cover them.

Cleansing

## Cleansing Ointment.

Take half a pound of the digestive ointment, melt it gently over a fire; when melted remove it, and as it cools, carefully stir into it an ounce of verdigrease, finely powdered; continue to stir it until the ointment becomes stiff.

Over the pledgets that cover the sores apply the following poultice as often as you use the fomentation.

## Discutient Poultice.

Scald a sufficient quantity of bran, with a proper quantity of the fomentation just now prescribed; add to it a small quantity of oil to prevent it from drying and sticking, and sprinkle upon the face of each poultice, when applied, a quarter of an ounce of camphor.

Whatever medicines or methods are used, a good nourishing diet should be allowed; and, if possible, the horse must be put to grass where he can shelter himself in a stable or a shed, at pleasure: the want of this last will greatly prevent



the effect of the best medicines, and with it medicines will rarely be wanted. If he cannot be turned out day and night, nor even in the day time, he must have a roomy stall, where he can move about, lay down, and stretch himself at full length; it would be the best if he had the whole stable to walk in, for then he would be more apt to lay down often; a circumstance that conduces very much to advantage, for constant standing in a stall is what frequently causes, and by consequence must continue the disease.

### G U T T A   S E R E N A.

A gutta serena is a loss of sight, without any other manifest defect of the eye, except that the pupil seems a little broader than common, and will not contract, whatever degree of light crowds through it. Certainly to know whether there is a gutta serena, lay your finger on the eye-lid, and rub it a little while over the pupil (suppose a minute), then look into the eye, and if it is good, you will perceive the pupil enlarge itself from a smaller to a larger circumference; if there is a gutta serena the pupil will be the same, whether in the dark or the light,  
and

and suffers no change by any common attempts made on it.

As the eye looks well, the first signs by which this disease is suspected, are his raising his head, as if he was looking at the light, as soon as he is brought out of the stable, raising his feet as if he would step upon higher ground, and setting them down again as if he was afraid to go on; and as soon as the light affects his eyes, he pricks up his ears, moves them backward and forward, frequently pointing them toward the eyes, and, except with those persons that he is familiar with, he grows more shy than usual.

It may be caused by external injuries affecting the eye, particularly the optic nerve, as is generally the case when it comes on suddenly; when it approaches gradually, the cause is a palsy of the optic nerve, from a pressure on it by the turgescentcy of the artery that passes thro' it, or some other cause producing the same effect on the nerve; this palsy extending to the retina and to the ciliary processes, is the occasion of the constantly dilated state of the pupil. Extravasated humours or hard tumours may press the optic nerve, and cause this disease.

If the horse is in good condition, bleed as freely as his strength will admit; let his diet be light and moderate, but good of its kind; let him have constant gentle exercise. If the blood is poor, bleeding must be omitted; but purging, with diuretic medicines, must be persisted in some time, with a good nourishing diet. Many are the methods of cure which are proposed by different authors, one insisting on a gentle course of mercurial alteratives; a second, proposes antimonials in the same manner; a third lays the whole stress on aromatics and volatiles; and others without end have their favourite plans, each differing from the other; and, for any thing that is certainly known, very probably differing from that which is the adequate means: upon the whole, to bring the constitution as near to health as possible, is the only general intention that can at present be proposed. As to particular aims or applications, art hath not yet satisfactorily pointed them out.

## H      A      W.

An haw is a spongy excrescence, beginning in the inner corner of the eye next the nose: it gradually increases so  
as



as sometimes to cover great part of the eye, and to obscure the sight.

The best method of cure is to cut it away, though, while it is very small, it may be destroyed by the following powder.

Take twenty grains of cuttle-bone; ten grains of common glass, finely levigated; fifteen grains of white vitriol; half a drachm of Florentine orice-root; mix, and blow a little upon the haw three times a-day; and half an hour after each time this powder is blown in, wash it away with a little brandy and water.

If this excrescence is cut away, do not cut it too near, for that on the other hand may cause a bleared eye. After the harder part is all cut off, you may dress the wound with honey of roses, mixed with one eighth part of tincture of myrrh; and if spongy flesh arises, sprinkle it with burnt alum.

## H E A D - A C H.

All the noted signs of a head ach, are symptoms that are common to several other diseases, so that it is next to impossible to ascertain the presence of this disorder in brutes; and even if we made a

probable guess that the head-ach afflicted the horse, it would be difficult to discover its truest cause; for instance, whether it was an affection of the brain, or produced by sympathy, as from a disorder in the stomach or some other part.

The signs of the head-ach, as noted by others, are the ears hanging down, as also the head, resting it against the manger, dimness of sight, watery eyes, dropping of the urine, &c.

As to the cure very little can be said, seeing the difficulty there is to know when the disease is attendant, and the yet greater difficulty of knowing whence it proceeds. In general, whatever disorder is discovered, it must be removed; on that, very probably, the cure of the head-ach will depend.

### H E E L S   T O O   N A R R O W .

For the most part, narrow heels are a natural defect; but when they are incurable, the cause of that is for the most part a bad method of shoeing. Whenever a colt is observed to have a narrow heel, let not the foot be hollowed, or any thing be pared away for shoeing, but what is decayed or decaying; thus the  
narrow-

narrowness in time will change for the better; but if, as is too much the practice, you nollow the quarters very much, and then put on a broad shoe, you widen the lower part a little, but the upper is made proportionably narrower, by which the effects are worse than the disease you attempt to remedy.

### H I D E - B O U N D.

When a horse is hide-bound, his skin sets so close on his ribs, that you cannot take hold of it betwixt your fingers and thumb, nor raise it therefrom without difficulty; his bones stand up, he is very lean, his dung hath a very disagreeable smell, and he is very costive. Hard usage and bad keeping are the most general causes. When it is an original distemper, but it is for the most part a symptom attending some other disease, the hide-bound horse is said by many to be chest-foundered or body-foundered.

As to the cure, if it is a symptom attending another disease, its remedy is the removal of the disease on which it depends. In general it requires a cooling laxative diet. When it is an original disease,



ease, its causes will, as soon as discovered, point out the most proper remedy.

### H O O F - B O U N D.

A horse is said to be hoof-bound when the hoof runs so tight round the instep as to make the foot appear somewhat like a ball. In this case, the best remedy is to cut out seven or eight lines of the eighth part of an inch broad from the coronet to the toe; and as near to the quick as possible, without actually injuring the horse, then fill these lines with pitch, and let the horse run at grass a few months, until the lines are worn out.

### H O O F S D R Y.

If the hoofs are too dry, rub them well every day with lard, or any other greasy substance: in this case, the feet too are for the most part too dry; if so, clean them every evening after travelling, or other labour, and rub them well with grease, then stuff them with bran and grease, or with cow-dung, having first greased them well.

### H O O F

## H O O F L O S T, &amp;c.

The hoof may be separated by any matter getting between the hoof and the bones of the foot: and whether the hoof is separated thus, or by any other means, provided that the bones are sound, a new hoof may be procured. On the separation of the hoof, a leather boot, with a strong sole, should be fastened about the pastern, bolst'ring the foot with dossils of soft flax, so that the horse may tread easy, dressing the sore with the digestive ointment.

## H O O F S T O O M O I S T.

When the hoofs are too soft or moist, if it is owing to their standing too much in wet litter, running in wet ground, or other accidental cause, the cure will consist in removing such circumstances: but if it be natural, relief is not so easy: however, let the horse run in dry ground, and wash the hoofs every day with a strong decoction of oak-bark, or a solution of alum in water, or rub them with the levigated powder of calamine-stone, or with white lead.

## HOUGH BONEY.

It is a hard tumour growing on the elbow of the hough, and heels, like a cartilage, or a tendon. It usually proceeds from blows, strains, or such like external causes, and is difficultly removed. The matter that composes it resembles hard glue. In the beginning it will sometimes be dispersed by rubbing it well with a strong mercurial ointment; but it oft requires to be fired, and then dressed with digestives, to waste it.

## H U M O U R S.

When a swelling happens on any part, the common phrase is, the humours are fallen there, hence endeavours are made to draw them away, or to repel them; thus, by a jargon of words, the mind is led off from attending either to the proper means, or from the method of applying them to the greatest advantage; for a relaxation of the solids may be the cause of the complaint, by consequence, relief will be only had from restoring their former strength. And according to other  
different



different causes, different remedies will be required.

The word Humours hath so indeterminate a use amongst many, as hardly to have any meaning in it; but, in general, it contains this supposition, viz. that there is a faulty quality in that to which this name is given. Humour is only another word for Fluid. The blood is the general humour or fluid, from whence all the other humours or fluids in the body, except the chyle, is separated; naturally these humours or fluids neither err in quantity or quality, though they may accidentally become faulty either way, or in both at the same time.

Again, to say the humours or fluids without specifying what particular ones are intended, is using a word without signification or advantage; for, without a knowledge of the particular humour or fluid that is in fault, we must be ignorant of the proper method of altering either the quantity or the quality. The quality of all are changed by alteratives; but different alteratives are sometimes required, not only for the different humours, but also for the different states of the same humour; and as to the quantity, a redundancy of red blood requires bleeding;

an excess of serum requires purges or diuretics; and other means are adapted to other humours; particular acquaintance with which is necessary before they can be altered in their quality, or either increased or diminished in their quantity.

### J A R D O N.

A jardon is a hard swelling on the outside of the hough; it may proceed from the same causes as the bone-spavin, but is generally occasioned by setting horses on their haunches in teaching them their exercises.

It is not attended with much inconvenience, and is cured by blistering as directed in the bone-spavin; though sometimes, if observed in the beginning, it will give way to rubbing with vinegar, and such like repellents.

### J A U N D I C E.

The jaundice is commonly called the yellows.

This disorder is sometimes a symptom of some other, but when it is the original disease, its seat is always in the liver.

Horses

Horses have not a gall-bladder, as men and most animals have, but the vessel called the gall-pipe, in which the gall is separated as into a bag, is large enough to answer the ends of nature, for horses abound with gall as much as any other known species of brutes ; and as with the gall-bladder in others, so it is with the gall-pipe in horses when the canals, that separate the gall into it, are obstructed by concretions, spasms, or other causes, it returns into the blood, and produces all the symptoms attendant on this disease.

The signs of this disease, are the deep yellow colour in the eyes, and inside of the mouth and lips. To distinguish this yellowness from that which often appears at the crisis of an inflammatory fever, will easily be known by enquiry, whether such fever lately affected the horse ; and, secondly, if this yellowness is the result of such a fever, he begins to recover his appetite when this yellowness appears ; but he loses it if the jaundice gives rise to the colour. But to go on with the signs of the jaundice : the horse, besides the yellowness just named, grows sluggish, low spirited, and faint ; his appetite is equally lost to all sorts of food ; he hath a slow fever and pulse ; he breathes with  
dis-



difficulty; he discharges a dirty brown coloured urine, which looks very red after it is cold; the dung is dry, and of a pale yellow, or light green colour. If there is much inflammation of the liver, the fever runs high, and he grows frantic. If the distemper hath continued long, or is chronical, the horse will also have an appearance of one that hath been surfeited; there will be a perceptible hardness in the off-side, occasioned by the swelling of the liver, which, when scirrhus, is incurable, and usually, a diarrhœa coming on, the horse dies.

If the case is recent, and the horse not worn out with age, or bad usage, the cure is seldom either difficult or tedious; it is generally necessary to begin with bleeding, according to the strength and condition of the horse, and immediately after give him the following purge.

Take of aloes and rhubarb, each one ounce; saffron and salt of tartar, each two drachms; powder them separately, and then rub them well together in a mortar before you make it into a ball, which may be done with treacle or honey, and given early in the morning. Or,

Take

Take ten drachms of aloes; rub it well with half an ounce of Venice soap, or with the same quantity of cream of tartar.

Let either of these purges be repeated to a third time, at a week or ten days distance from each; and on the days when the purge is not operating, give the following balls and drink.

Take of aloes and ginger, each two ounces; Castile soap and nitre, each a pound; treacle or honey, enough to make a paste, to be divided into sixteen balls, one of which must be given every night and morning, with a pint of the following drink.

Take of madder-root, one pound; well bruised monks-rhubarb, sliced, half a pound; liquorice-root, four ounces; boil them in ten quarts of water to two gallons.

Usually the yellowness begins to abate by this method in a week or ten days: sometimes the eye-lids will swell up when a crisis approaches; in this case continue the medicine two or three weeks, to prevent the humour destroying the sight;  
but,

but if the obstinacy of the disease resist these means, mercurials must be used as follows.

Give two drachms of calomel, or of mercurius alkalizatus, and repeat it at proper intervals, that it may not salivate, and in the intermediate days give the following balls.

Take Castile-soap, half a pound; saffron of antimony, four ounces; filings of iron, four ounces; salt of tartar, two ounces; make them into a paste, and give two ounces, made into a ball, every night and morning with a pint of the above drink.

### INFLAMMATION of the PLEURA, &c.

Inflammation of the pleura, lungs, diaphragm, &c. are all attended with a violent fever, have most of their symptoms alike, and the general method of cure is the same in all: the principal peculiarities are distinguished as follows.

The inflammation in the lungs is called a peripneumonia; an inflammation in the pleura is called a pleurisy; an inflammation of the diaphragm is called paraphrenitis, &c.

The



The signs of a pleurisy are, besides the usual signs of a fever, which at the first are moderate but sometimes very violent, with great difficulty of breathing; he shifts about frequently, is very restless; his flanks work and heave excessively; his belly, for the most part, seems to be drawn up: at the first onset of the disease, he attempts frequently to lie down, but suddenly starts up, turning his head to one side as if he was griped; but in the gripes the heat is succeeded by cold, and this by heat again alternately: when he lays down he rolls, stretches out his legs, &c. as may be seen in the article COLIC; whereas in the pleurisy the heat is constant both in the body, ears, and feet, with a hard and quick pulse; and, what is yet more particular, when in a beginning pleurisy he attempts to lay down, he rises up, and runs back as far as he can, and there stops and pants until he is easier, or falls down.

When the inflammation is in the lungs, the symptoms are in general the same as in the pleurisy, except that in the beginning he is not so restless; and, during the whole disease, he never attempts to lie down; he hath a short cough; and his mouth, instead of being parched as in a pleurisy,

pleurisy, hath a ropery-slime constantly in it, which dribbles away plentifully; and he hath a running at his nose of a reddish yellow colour, which, by reason of the great heat, becomes very vitcid, his flanks seem easy, except after drinking or stirring a little, his belly seems rather distended, and his ears and feet generally cold.

If the diaphragm is more immediately the seat of the disease, the chief difference from the signs of a pleurisy is, that in this case the jaws are so set at times, that nothing can be got into the mouth.

If the bowels are the seat of the inflammation, and the violence of the symptoms threaten a mortification, this will be suspected by the hard, black excrements, which are ejected in small pieces, and after frequent efforts with seeming great pain.

In the method of cure, the difference is less than the symptoms which are the distinguishing characteristics.

Early as possible bleed: if it is a strong full-fleshed horse, take away six pints of blood; and if the violence of the disease seems not lessened thereby, take away three or four pounds more the next day, and if need be, take away two pounds more

more the third day. On speedy and free bleeding in the beginning, the chief dependence is had. A weak, old horse, will require much discretion in these cases, his strength not admitting so free bleeding.

The diet must be cooling, relaxing, and solutive, and the treatment in general the same as in the first five sections under the article FEVERS, only after each dose of the saline powder, or with it, as your discretion may lead, have a pint of pectoral drink given him; and if the cough is troublesome, a hornful of the same may be given every two hours, beside what is given with the powder.

#### Pectoral Drink.

Boil four ounces of French barley in three quarts of water, until the barley is soft, then add thereto of sliced figs and bruised raisins, each four ounces; liquorice-root, bruised, one ounce; boil them a little while, so that two quarts of liquor may be strained off.

In obstinate cases that have not given way to the above treatment, a strong decoction of the rattle-snake root hath been singularly useful: it powerfully alters the inflammatory state of the blood; in diseases



eases of the breast and lungs, it promotes expectoration ; it promotes both perspiration and urine ; and it loosens the belly.

#### Decoction of Rattle-snake Root.

Take rattle-snake root, four ounces ; boil it in six pints of water to four ; then pour off the liquor, and give it all in twenty-four hours.

To the emollient glyster, two ounces of nitre (or of Glauber's salt, if the horse is very costive) may be added in these inflammatory complaints.

If, by the above, he begins to run at the nose, you may expect a recovery very soon ; and as the heat and signs of pain decrease, the medicines may be given more sparingly ; and when he begins to eat, the cooling medicines may be omitted, but continue the pectoral drink. As soon as you can lead him out and exercise him, take care that his diet is opening, light, and nourishing : at least for a fortnight after he begins to recover, he may have three or four small feeds of oats, besides a mash or two of bran, or of barley steeped in hot-water until it is soft,

There

There is also a false, or bastard pleurisy; it hath been called a chest-founder. It consists of an inflammation of the muscles that are seated betwixt the ribs, and is known by a stiffness of the body, shoulders, and fore-legs, uncommon heaving of the flanks, a shrinking when touched there; and sometimes a staring coat, and a dry, short cough. It should be remembered, that when horses move with difficulty in their fore-parts, from stiffness or from pain there, he is generally said to be foundered in his body; but, for the most part, the cause is in the hoofs, or in the feet. This should be attended to carefully, and distinguished from the bastard pleurisy.

In order to the cure, bleed, and rub the sides over the ribs, twice a-day, with a mixture of two parts olive-oil, and one part volatile spirit of sal ammoniac: give gentle purges at proper distances; and let the diet be barley, boiled soft, or bran given either dry or in mashies. This disorder sometimes terminates with an abscess on the shoulder, or on the inside of the fore-legs.

## I      V      E      S.

The ives are also called vives, from, perhaps, a mistake in the French word Avives. It is a swelling in the glands under the ears of a horse, and very much resembles the strangles; but the cough in the ives is generally worse than that which attends the strangles, and the horse swallows with great difficulty.

Generally it happens to young horses, when full grown. When old horses are affected with it, it indicates a very bad state in the constitution, and is frequently followed by the glanders.

The tumour rarely suppurates, but gradually disperses by bleeding according to the strength of the horse, and repeating it in lesser quantities as may be required, by purging, and rubbing the swelling with the milder blue ointment, every day once or twice. But as the trouble, either to the attendants or to the horse, is very little more, if any, in endeavouring to bring on a suppuration in the same manner as directed for the strangles; the certainty of securing thereby, against all future inconveniences, from a translocation of the matter where it would  
be



be more pernicious, is so much greater, as to give a preference to this method.

## KIDNEYS DISORDERED.

Many are the diseases to which the kidneys are subject, such as inflammation, obstruction, ulceration, relaxation, &c. whence suppression of urine, diabetes, bloody urine, &c. but the gravel and the stone very rarely, if ever, affect horses, notwithstanding some directions are given for these complaints in case of an instance thereof occurring. These diseases which do often disorder the kidneys, if they continue long are usually dangerous, particularly if the horse grows feeble, if blotches which turn into scabs appear, or if his appetite continue to fail.

An unusual weakness in the loins; foul or bloody urine discharged with difficulty; loss of appetite; faintness, if put to any exercise; when he is put to step backward, if it occasions a considerable degree of pain, easy to be observed by a by-stander; any or all these indicate some degree of fault in the kidneys. The last symptom happens to horses whose back or loins have been strained, but it is then unattended with either the loss of  
K
appetite

appetite or flesh; or the disordered appearances in the urine, except now and then, that it is rather more high coloured than is natural to a healthy state.

If the difficulty of staling be attended with much fever, an inflammation in the kidneys may be suspected. If the urine is freely discharged, but is foul, dark coloured, or foetid, and has a red or purple coloured sediment, on standing a little while, there is an ulcer in the kidney, which will gradually destroy the horse: in the milder kind of ulcers, the sediment hath the appearance of good pus or matter, from the surface of a wound, only mixed with blood, which distinguishes it from the matter which is discharged from an ulcer in the bladder, which is without or with very little blood, and that, darker coloured than that which arises from the kidneys.

In all disorders of the kidneys, violent exercise and heavy burdens should carefully be guarded against. Young horses have frequently a weakness in their kidneys; in which case if care is had not to exercise nor to load them too freely, and to feed them regularly and tolerably well, until they are six or seven years of age, they

they will out-grow this infirmity; but neglect hereof will be their destruction.

To relieve these complaints, if there is any degree of fever, bleed according to the strength and condition of the horse, and give the cooling medicines directed for fevers: the heat being moderated, and his belly tolerably lax, give the following. If there is no fever, nor tendency to inflammation, the bleeding may be omitted; in its stead put a rowel under the belly, then proceed as follows.

#### Diuretic Balls for Diseased Kidneys.

Take balsam-capivi, Venice-soap, and nitre, of each one ounce; beat them well together, and form them into a ball, which repeat every four, six, or eight hours, until the urine is freely discharged and recovers a more healthy appearance: let his drink be water, in which parsley or marsh-mallow roots have been boiled, with four ounces of nitre in each gallon.

N. B. While the fever runs high these balls may be made with one ounce of gum arabic in the place of the balsam-capivi.

## L A M P A S.

The lampas is a fleshy excrescence in the roof of a horse's mouth, which sometimes grows so upon and over the teeth, as, in some measure, to hinder his feeding.

Most young horses have more or less of it; but as they grow older the whole becomes flat again, though no assistance hath been given, so needs no other direction but to save the poor beast from the usual cruel operations, by letting him run, without any farther concern on that account.

## L A X.

Many horses, as well as men, have naturally a loose belly, and others are more costive; some are frequently dunging, and such generally eat a great quantity, but still are weak. If a travelling horse is observed to beshit his hoofs, let his stages be short, and always give him beans with his oats. A horse is in the best order that only dungs once, or, at the most, twice in ten miles riding. Young and fiery horses are often very lax;  
but



but this weakness generally leaves them by the time they are seven or eight years old, if they have been properly fed and but gently exercised. The fiery sort sometimes continue to purge after any extraordinary exercise, for their digestive powers are, for the most part, but weak; and also eat so speedily, that they swallow their oats almost whole, and eject them in the same state.

When a purging is habitual, or happens by accident, until the horse seems to lose strength or flesh, or both, it is not necessary to give him any astringent medicines, as the discharge may be only a salutary effort of nature to throw off what is either redundant or offensive; a gentle purge may be given, and a few mashes of bran; which, perhaps, by assisting nature, may perfect a cure: but if the disease continues, and the horse loses flesh, grows dispirited and feeble, recourse must be had to astringents. When the dung is like that of a cow, but the vigour of the horse not impaired, he is said to have a lax: but when the strength and flesh fails he is said to have a scouring or purging.

Various are the causes of this disorder; as catching cold, or a weak digestion, in

which case the food is discharged, more or less, as it was received into the stomach; viscid matter obstructing the lacteals, in which case there is a milky appearance mixed with the excrements, &c.

When a scouring comes on at the latter end of any obstinate and tedious disease, as low, putrid fevers, farcy, &c. they are usually the fore-runners of death, particularly if they are accompanied with a disagreeable discharge at the same time from the nose.

If the scouring proceeds from cold, and there is some degree of fever, according to the strength of the horse and the violence of the heat, bleed; then give the following :

Take of rhubarb, half an ounce, or six drachms; lenitive electary, two ounces; mix, and make a ball.

Repeat this, every two or three days, until the fever abates; and betwixt the days of giving the rhubarb, give the following astringent medicine once a day.

#### Astringent Decoction.

Take oak-bark, grossly powdered; boil it in a pint of water to the consumption

tion of one third, then pour off the liquor for one dose.

Except the fever and purging increased together, great care should be taken not to check the purging, lest the fever be increased thereby.

If little or no fever attends, after bleeding, give the following solutive ball.

Take of aloes, half an ounce; diapente, one ounce; treacle, enough to make a ball; repeat this once a week, and, if there is much griping and distention from wind, the restraining glyster will be necessary.

It may be proper to remind the reader, that in these complaints, glysters should be small in quantity; and if the disease is violent, they should be repeated as often as they come away. If there is great pain, forty drops of liquid laudanum may be added to one of the glysters, and repeated as the urgency thereof requires.

If the scouring still continues without relief, give two drachms of cerated glass of antimony, mixed with one ounce of diacodium, or two ounces of cordial ball.

Alum, Armenian bole, or other astringent and absorbent medicines, are given to one ounce, once or twice a-day, but usually one or two doses will answer the end.

If the cause is a weak digestion, which is known by the food passing nearly in the same state in which the stomach received it; the dung being very soft and pale; the appetite small, and the horse very lean: beside gentle exercise and dry food, such as the best hay, beans in larger quantities than are usually given, and these so moistened that the horse need not drink much, give the following stomach-purge, and repeat it as occasion may require.

Take of aloes, half an ounce; cream of tartar and myrrh, each half an ounce; treacle, enough to make a ball: and on the days in which this purge is not operating, give the following

#### Stomach Drink.

Take of oak-bark, bruised, half a pound; Gentian root, sliced, one pound; ginger, bruised, two ounces; infuse them in a gallon of ale for three or four days,  
and



and give half or three quarters of a pint every night and morning.

When a viscid matter obstructing the mouths of the lacteals gives rise to this disorder, a summer's grass, or, which is still better, the salt marsh, will effect a cure: where these cannot be obtained, the stomach purge before directed may be given once a week.

In any of the above cases, where there is a discharge of sharp, slimy matter, with severe griping, avoid oily and greasy things, but give the following in glysters, viz. Tripe-liquor, or very thin starch; either of these may be given to three or four pints at a time, and liquid laudanum, to the quantity of forty or sixty drops, may be added to one of the glysters, to moderate the pains, and repeated as may seem needful.

When blood appears with the excrements, it is called the bloody flux: in which case, if there is great pain, and frequent motions for a discharge, there is also great danger. In this case give frequent glysters of tripe-broth, or thin starch, with thirty or forty drops of liquid laudanum in each, until the pain is abated in some measure; and give the

same medicines as above directed for the more obstinate scourings, particularly the ball made with cerated glass of antimony, and cordial ball. For common drink give the following.

Boil a pound of burnt hartshorn in ten pints of water to a gallon: at the latter end of the boiling, add to it four ounces of gum arabic, continually stirring until the gum is dissolved, then remove the whole from the fire.

### L E T H A R G Y.

With very little attention diseases of the lethargic kind are discovered: in these cases the horse is observed to be sleepy; and, if in the stable, his head is always resting on the manger: now and then he is inclined to eat, but seems to sleep before he hath chewed what he takes into his mouth, and keeps it there till he awakes, except by chance that he swallows it whole.

If he hath a good appetite, and drinks freely; if he lays himself down, and rises with seeming care, though it be but seldom that he stirs himself, you may hope very favourably: but if he seems stupid;  
rarely

rarely laying down, and is inattentive to whatever comes near or is done to him; if he dungs and stales but seldom, or during his sleep, there is little reason to expect a recovery. A whitish discharge from his nose proves useful; but if it is viscid, and increases in quantity, so as to form a ropey, ill-coloured, reddish green matter, the disease generally proves mortal.

If the horse is young, strong, and full of rich blood, as is the case when the eyes appear full and red, bleed him moderately, remembering, that horses in lethargic diseases seldom bear much bleeding; then give an opening glyster, with common salt in it, to render it the more stimulating, and repeat it once a-day as there may be occasion. If the horse abounds more with serum than with rich blood, bleeding should be entirely omitted, and brisk, but not strong, purges must be used in its stead: the glyster just named may be injected once a-day, except on the day when a purge is given. Volatile medicines, cordials, the foetid gums, and stimulants, are all highly useful after due evacuations. If, after the use of bleeding, when it is required, the redness, fullness, &c. of the eyes abate,

and a thin rheum begins to distill from the nose, a little powdered assarabacca may be blown up into it every day; but if the cause was a ferous one, you may begin with the assarabacca as soon as you please.

### L I P P I T U D E.

A lippitude is a defluxion of a salt, sharp humour from the eyes, attended with itching, pain, and redness; the eyelid swelling, so as to turn the inside as it were outward; the sight grows dull, and the eyes frequently are closed up: it usually attacks young horses at about five or six years of age; it comes and goes once in three months, or oftener, and continues each time, more or less, from a week to a month; thus it goes on, perhaps, two years or more, when all the symptoms cease, but ends in a cataract.

The sharp humour above mentioned runs down the cheek in greater or lesser quantities, and is so hot as to scald and destroy the hair there: the veins in all the parts about the eye are very turgid; sometimes the eye appears dull, at others cloudy, then again clearer; but it is rarely  
sprightly:



sprightly : the humour that distills from the eyes is sometimes so thick as to glue up the eye-lids for some time.

The seat of this disease is the glands on the inside of the eye-lids ; and it may be observed, that if they are of a good size, and well shaped, if they are clear, and the sight is good ; as soon as the sharp humour abates, if the returns are less violent and more rare, some hope of recovery, without ending in a cataract, may be indulged ; but if the eye shrinks and grows less, a cataract will certainly ensue.

In order to the cure, if the eye is not in a perishing state, and the horse in low condition, bleed ; then, once in eight days, give a cooling purge ; and, on the days free from purging, give diuretics, particularly nitre, to the quantity of two ounces in a day : and, in order to strengthen the relaxed glands, and membrane of the eye-lid, many light scarifications may be made, with a lancet, on the inside of the eye-lid which turns out ; then the whole eye, and the inner part of the eye-lids may be washed two or three times a day with the following lotion.

Take

Take of white vitriol, two drachms ; camphor, one drachm ; rub them well together, then gradually mix them with a pint of water.

When, by these means, the sharp humour decreases, give the following alterative powder, every morning, for two or three months ; then, after an interval of the same time, repeat it as before.

#### Alterative Powder.

Take of crude antimony, half an ounce ; gum guaiacum, two drachms ; mix them for one dose.

When the blood vessels about the eyes and parts adjacent, are extremely turgid, they may be well bathed, two or three times a-day, with strong vinegar. It is the practice of some, on these occasions, to take up the principal branches of veins ; and, in some other cases, to tie up arteries ; but this method is rather hurtful than otherwise, by checking the circulation and depriving the parts of nourishment.

If the eye seems to shrink, wash it with the following, two or three times a-day.

The

## The Collyrium.

Take of crude sal ammoniac, two drachms; brandy, four ounces; lime-water, one pint; mix.

With this collyrium, try also what a better diet will do; allow him a moderate quantity of oats: good nourishment and moderate exercise may give a favourable turn; indeed, in disorders of the eyes, hard labour should be universally avoided. It is worthy of remark, that low keeping, after good and plentiful feeding greatly hurts the sight; and hard labour, added to the sparing diet, aggravates the disadvantage considerably. Colts are often made to go blind by full feeding and early hard working.

These means not succeeding, the last resource is mercurials; and, perhaps, the most proper will be the turbith mineral, which may be given as directed for the farcy.

## M A L L E N D E R S.

Mallenders are cracks on the bend of the knee, discharging an almost corrosive matter, occasioning a horse to stumble frequently,

frequently, in consequence of the stiffness and lameness of the part.

Sallenders differ no way from Mallenders but in their situation, which is in the hough. Frequently these cracks are accompanied with a scab, and a staring or bristling of the hair thereabout.

Keep them clean by dressing them, once or twice a day, with the stronger blue ointment, spread on tow, and continue this until the scabs fall off, and they are disposed to heal. If this application suffices not, rub them first with the following, every time you dress them.

Take of hog's-lard, two ounces ; sublimate mercury, two drachms ; powder it finely, then mix. Or,

Take soft green soap, six ounces ; strong blue ointment, two ounces ; white vitriol, two ounces ; mix.

Rub the part with either of these, and then apply the pledget of strong blue ointment, having taken care to clip away the hair, and to clear the scabs from all filth, &c.

M A N G E.



## M A N G E.

The chief cause of this disease is poor feeding, want of rubbing, or infection: its seat is on the surface of the true skin, and in the scarf-skin.

The horse is known to have this disease by the skin appearing wrinkled and hardened in different parts, the hair on those parts standing out like bristles; the ears and eye-brows lose their hair.

When it is received by infection, the sulphur ointment is preferable to all other means.

## Sulphur Ointment.

Take flower of brimstone and hog's-lard, of each equal parts; and mix them well.

Rub it well in once a-day, wherever it is required, but do not rub so hard as to give pain, or to occasion soreness; and, during the use of this ointment, give of crude antimony and flower of brimstone, each one ounce, every morning.

If the case prove very obstinate, wash the mangey parts with sublimate wash, and give the brimstone inwardly.

If

If poor feeding and hard work is the cause, the cure will be obvious.

Sublimate Wash.

Take of sublimate mercury, half an ounce; lime-water, a pint; mix.

M O L T E N   G R E A S E.

This disorder happens not but to over-fat horses, and that very rarely: in it there is a great quantity of a greasy or oily matter discharged with the dung, occasioned by violent action: but this must be distinguished from the yellow matter like slime, which is discharged by horses that have worms, and from that slimy matter which is seen in the dung of costive horses.

The melting of the grease is accompanied with great heat and fever, and the blood, when taken away, discovers a buff-coloured skin on its surface as fast as it cools; there is a seeming inward anguish, with most of the symptoms of a violent inflammatory fever; the dung is sometimes of a good consistence, but for the most part it is very loose, and is always covered, as soon as it cools, with a yellowish white matter, resembling both  
size

size and greafe. The horfe soon becomes poor and hide-bound, and his legs swell.

Bleed freely, and repeat this evacuation, in less quantities, two or three times, according to the strength of the horfe, and the quantity of the buff-coloured skin that is on the blood, when cool; and if the horfe is feverish, give him an emollient glyster, with one ounce of nitre dissolved in it, twice a-day; and give him nitre dissolved in his drink as much as he will freely take.

When the fever is abated, and he begins to eat, give a gentle purging drench with fenna, &c. and repeat it once a week; or, perhaps, the following may be preferable.

Take of aloes and gum guaiacum, each half an ounce; myrrh, two drachms; treacle, enough to make a ball.

Every morning give half an ounce of the saffron of antimony, and two drachms of gum guaiacum, with a little bran; and let all his drink have some nitre dissolved in it.

## MORTIFICATION.

A mortification may happen on any part of the body, and in any age: but if aged horses are the subjects they rarely recover.

A mortification in its beginning is called a gangrene; its signs are a sudden, but a violent inflammation with pain; a deep red colour, inclined to a purple or a lead-colour, &c. to black.

On the first appearance of these symptoms, make scarifications to the quick, then rub the part with the following embrocation:

Take oil of turpentine four ounces; tincture of myrrh and aloes, one ounce; mix.

Or, instead of this embrocation, rub the part with spirit of wine.

Give one of the following balls three times a day:

Take of Peruvian bark, four ounces; Virginian snake-root, two ounces; camphor, two drachms; mix them well, and make them into four balls.



## O P H T H A L M Y.

In all inflammations of the eyes, whether from external or internal causes, bleed immediately, according to the strength of the horse; purge once every week, and on the days that purges are not operating, let diuretics be given, such as nitre, to two or three ounces a-day, in masches of bran. The diet, if in the house, should be masches of bran, or scalded barley; and, while the inflammation is considerable, hay, oats, and all hard meat which requires chewing, should be avoided; hard labour, and sometimes hanging down the head to graze, is hurtful.

Dip a doffil of lint, or a very soft sponge in the following eye-water, and wash the eye-lid with it two or three times a-day; and, if opportunity favours, squeeze the sponge so as a few drops may run into the eye each time you bathe it.

Take of red-rose leaves, dried, two drachms; infuse them in half a pint of boiling water, until it is cold; then add to the strained liquor twenty grains of sugar of lead.

When

When the inflammation is nearly gone, the following will be the most proper for completing the cure ; as it not only repels the humours, but greatly strengthens the vessels also.

Take of white vitriol, half an ounce ; sugar of lead, one drachm ; dissolve them in a pint of pure water.

If the inflammation is very considerable, and the veins on the inside of the eye-lid are very full, much relief is given by opening one of the most turgid of them with a lancet.

If there is much swelling, as frequently happens after blows, bites, &c. a poultice of scalded bran, or the crum of white bread, boiled, must be applied and renewed as often as it cools.

Sometimes, from the violence of the inflammation, the coats of the eye lose their natural transparency, and turn white, or of a pearl colour ; in consequence of this, the sight is greatly diminished, if not totally obstructed ; but sometimes a white blister forms itself on the cornea, as large as a grape : this always relieves, and when it breaks, the cure is speedily effected.

In

In gross habits, and where there seems to be naturally a weakness in the eyes, disposing to this disease, recourse is sometimes had to rowelling, with considerable advantage.

It may not be amiss to give in this place a caution against the use of powders in eye-waters; for, in the first state of inflammation, the eye is very tender, and the finest powder will irritate it, and occasion more or less pain, therefore, medicines that admit of solution, are the only proper ones in these cases.

### O S S E L E T S.

Osselets or oslets differ not from splents except in their situation, which is about the joint of the knee, commonly toward the inside, and are only to be distinguished from the knee, by being rather below the joint.

They may be treated as bone-spavins, except that if the osselets are too hard to give way to blistering: firing will be unnecessary, for it will have no good effect.

All the boney excrescences such as osselets, bone-spavin, ring-bone, curb, jardon, &c. are all cured by the same method,  
and

and should be begun with, as early as possible, before they become hard.

## P A L S Y.

A palsy is when a part of the body loses its power of moving, or feeling, or both. When a horse loses the use of a limb suddenly, many farriers say that he is planet-struck, or shrew-run.

If there is only a trembling or shaking in the part; or if only one limb is seized with the palsy, it is seldom dangerous. When it seizes both limbs behind, the case is then very troublesome, and difficult to cure: but if one side is totally taken away, and the horse falls suddenly, the case is desperate.

Sometimes when a horse lays out on cold clay ground, his limbs grow numb, and are, for a time, useless; but, except the head be affected too, it is deemed rather a rheumatism than a palsy.

For the cure, bleeding, or purging, or both, should be used according as the vessels abound most with blood or with serum. If the horse is full of rich blood, vigorous, young, and strong, after bleeding and purging, volatile ingredients may be accompanied with attenuating coolers,  
If



If the horse is old, poor, or feeble, and full of viscid blood, omit the bleeding, but purge, and give volatile cordial medicines, with stimulating, nervous ingredients, such as snake-root, mustard, horseradish, &c. steeped in beer or ale, and given to three pints a-day. Three or four of these sort of ingredients may be put together, according to the intention of the prescriber, and of the compound, about an ounce may be allowed to each pint of beer.

If the hind parts are affected, beside the use of proper internals, rub the spine, particularly the loins, with the following

#### Stimulating Embrocation.

Take oil of turpentine, four ounces; oil of bays, four ounces; camphor, one ounce; oil of amber, three ounces; tincture of cantharides, one ounce; mix.

#### P H L Y C T Æ N E.

After inflammation of the eyes, there sometimes remains either pustules filled with purulent matter (these are called pustules), or they are filled with a trans-

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parent

parent humour, and then they are called phlyctæne.

When pustules arise on the tunica conjunctiva, they are reddish at the first, and afterward white; but when they are on the cornea, they are dusky at the first, and, in time, turn white.

The phlyctæne are transparent, hence they take the appearance of the part they lie on; they are more superficial than the pustules, and are not so difficult to remove.

All the danger from pustules, and from phlyctæne, is their becoming ulcers of a bad kind, which heal with difficulty.

The cure is the same in both cases. In the beginning you may attempt to disperse them, by washing them, two or three times a-day, with a solution of ten grains of saccharum saturni, in four ounces of rose-water: and when they give way, you may wash them with equal parts of brandy and water: but, if they neither disperse nor burst soon, the best way is to open them with a lancet, and then dress them with the sapphire water.

Sapphire Water.

Take of lime-water, one pint; crude sal ammoniac, one drachm; let them stand

stand in a copper vessel, or with a few bits of copper, until the water is of a blue sapphire colour.

## P O L L - E V I L.

This is an abscess between the sinuses of the noll-bone, and the first vertebræ of the neck behind the ears, and is caused, for the most part, by some external injury, though sometimes a critical discharge from some other disease gives rise to it.

If the cause is external, and is observed early, while the tumour is hard, or though there be a sharp humour destroying the hair thereabout, it may often be repelled with vinegar, spirit of wine, &c. If there is much inflammation, bleed, and apply warm poultices, and give a brisk purge; but if the cause is from some other disease discharging itself there, or if there seems to be a tendency to digesting, omit bleeding, purging, and all repellents, and encourage the suppuration by applying a warm poultice, two or three times a-day. When the matter is discharged, if it lodge on both sides, two openings must be made; but be careful not to injure the ligament which



runs from the head along the neck. The opening should be made as large as is convenient, and may be dressed with the digestive ointment: but frequently the matter contained herein is of a greasy and viscid quality, or otherways foul; in which case, what are called scalding mixtures are the best applications, and, for which purpose, take the following.

Take Ægyptiac ointment, two ounces; oil of vitriol, one ounce; oil of turpentine, two ounces; and of common sweet oil, half a pint.      Or,

Take corrosive mercury, one drachm; Roman vitriol, one drachm; verdigrease, one drachm and an half; rectified spirit of wine, two ounces; oil of turpentine, two ounces; and of common sweet oil, six ounces.

This latter is stronger than the first. When they are used, first clean the part with a sponge, then pour in as much of one of these mixtures as will be necessary, having first made it scalding hot, then secure it properly from running out, when the horse lays down: let it stay two or three days; and, if the matter is of a kindly appearance, the future dressings may



may be lint, dipped in spirit of wine: but if there is a plentiful thin matter, it must be scalded again; and this scalding must be repeated every three or four days until the matter begins to be well digested, and of a good consistence.

You need not fear to use this corrosive medicine, for the quantity of matter discharged from these abscesses cannot be lessened, nor the viscid greasy quality of it changed, but by these or such like applications.

## Q U I T T O R.

A quittor is an ulcer formed between the hair and the hoof, most frequently on the inside quarter. They are caused by bruises, or by neglecting to clean away sand, gravel, &c. that lodges in this part.

If it is superficial, the cure is easily performed, by bathing the swelling once a day with spirit of wine, and applying to the ulcer a pledget of the ointment as directed for SAND CRACKS, which see.

If the matter sinks under the hoof, part of it must be taken off, or the ulcer can never be healed; and the success in

this case depends very much on the dexterity of the operator, and ease to the horse, with which the piece of the hoof is divided and taken away.

Sometimes the matter runs under the quarter of the hoof, in which case that quarter must be removed: in this case, when the quarter grows again, it leaves a large seam called a false quarter, which weakens the foot and is never fairly cured.

If the coffin-bone be affected with the matter, the opening must be properly enlarged; all that is decayed must be taken away with a knife, for that is the easiest, and, when it is used with skill, it is the safest method; after which dress the wound with pledgets of the digestive ointment, with, or without the precipitate, as directed for sand-cracks, according as circumstances may indicate.

If there is much pain or inflammation, a poultice may be applied over the dressing, including the whole of the diseased part; but it should be taken off and warmed again, three or four times a day.

During the cure, the horse should run at liberty, and not be used for any kind of work.

R A T.

## R A T - T A I L S.

These are a sort of swellings, more or less hard, sometimes discharging a sharp humour, and sometimes they are dry: they run from the pastern upwards, on the back-sinew.

Those that are moist, usually give way to drying applications, such as the following.

Take four ounces of vinegar; of alum and white vitriol, each half an ounce; powder, and mix them.

The dry and hard sort, for the most part, give way to the stronger blue ointment; but if they do not yield to this, apply the following caustic ointment.

Take soft soap, two parts; quick-lime, one part; mix, and spread it just large enough to cover the swelling, but no farther, which must be prevented, or it will destroy more than is required.

## R I N G - B O N E.

A ring-bone is a hard swelling, generally on the fore and lower part of the

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pastern,



pastern, though some managed horses have it on the hind part, from resting very much on their haunches, but it is chiefly caused by strains or blows.

On young horses these tumours sometimes appear, and, without any assistance, they disappear; but when they do not, they rarely require more than blistering, as in the case of the bone-spavin. If the hardness happen to be too great to give way to blistering, fire it, and proceed as directed in the bone-spavin, only observing to make the lines very near, almost close to one another, and make them often cross each other; then, when the whole is clear, lay on a strengthening plaster, and let the horse go some time to grass.

When a ring-bone runs round the pastern, without running downward to the coronet, so as to hurt the coffin-joint, it is easily cured. But sometimes it proceeds from a natural defect in the joint; then the cure is difficult and uncertain: also, when this hardness is found under the round ligament which covers that joint, the cure is doubtful, for it frequently turns to a quittor, and sometimes forms an ulcer upon the hoof.



## RUPTURES.

A rupture is a protrusion of a portion of the caul, or of a portion of the intestines with the caul, through the hole at the navel, or into the cod. Violent coughing and straining are the usual causes.

The swelling in these parts, in consequence of these accidents, are as large as a man's fist, or larger, and sometimes descend very low.

As soon as perceived, they must be gently pressed back with the hand; in order to which, if the horse could be easily laid on his back, that posture would favour the return of the protruded parts. Sometimes the swelling is hard, and will not easily give way, in which case, bleed freely, give a purging glyster, and foment the part with flannel cloths, wrung out of warm water, gently attempting, while the fomentation is in use, to return the ruptured parts: during the intervals betwixt the use of the fomentation, let a pretty thick poultice be kept on the swelling, and, as oft as it cools, warm it again, and repeat the fomentation.

Let his diet be scalded bran or malt, or boiled barley, that his bowels may be emptied as much as possible.

When you have succeeded in returning the parts that were fallen down, a proper bandage is the only remedy for preventing a return of the like accident; and, by this means, with moderate, but good feeding, and gentle exercise, sometimes a horse continues to be useful.

### S A L E N D E R S.

Salenders are cracks in the bending of the hough. The disease is the same as the mellanders, which is only similar cracks in the bending of the knee. As is the disease, so is the cure, alike in both. See MALLENDERS.

### S A N D - C R A C K S, &c.

A sand-crack is a little cleft on the outside of the hoof. If this crack penetrates only through the hoof, the cure is easily performed, by rasping the edges smooth, and applying thick pledgets of the digestive ointment, mixed with one eighth part of red precipitate, finely powder-

powdered. Take care to secure these pledgets from falling off.

If there is any hollownefs under the hoof, or if the cleft penetrates through the ligament that unites the hoof with the coronet, there is danger of a quittor: in this case, rasp the cleft very thin and wide, and fire it with a cautery that is not too hot; then let the horse run at grass, and carefully avoid putting him to carry any load before he is well recruited.

### S C I A T I C A.

The sciatica is a continual dull pain, with a sense of gnawing about the hip-joint: strong doses of antimonials, or such medicines as give a great shock to the nervous system, are the alone proper means of relief.

### S C R A T C H E S.

Scratches are also called chilblains, kibes, or mules; they are sore chinks like cracks, in the heels, and the soft parts of the pasterns.

If they are much swelled, dress them with the digestive ointment, and lay a



poultice over them; and, when the swelling is gone, dress them with the green ointment, and then finish the cure with the drying applications commended under the article GREASE; after which, to keep these parts soft, rub them with a mixture of tallow and oil, always before you put the horse to exercise; and when his work is finished, they should be washed with warm water.

### SIT-FASTS.

Sit-fasts are usually the offspring of warbles; they are horny substances in the horse's skin. Sometimes they are dissolved by rubbing them well with the stronger blue ointment: but when this fails, the only cure is to cut it out, and treat it as a common wound.

### SPECKS.

If, after inflammation in the eyes, a film, or slough, commonly called a speck, remains, and seems either to increase or to endanger the sight, any of the following applications may be used.

Touch the speck with a feather that is dipped in the juice of celendine, or in the



the gall of an eel or pike, or in the oil of box; or blow upon the speck a little common glass, finely levigated: let any of these be used once or twice a-day; and if they seem to be too sharp, or occasion inflammation, dilute them with a little water, in which a small quantity of gum-dragon is dissolved.

## S P L E N T S.

Splents are boney excrescencies on the shanks of horses; they are long and flat, in various forms, and not much unlike splents. They seldom appear after a horse is past six or seven years of age: few colts are without more or less of them, but generally they disappear as strength increases; though an instance now and then occurs, in which all means to remove them are unsuccessful.

When a splent rises on each side of the shank; or, when a splent lies betwixt the bone and the back-sinew, it is then called a pegged or thorough splent.

Dr. Bracken makes so light of this circumstance, that he says he would not refuse to buy a horse on this account, if in other respects it was agreeable to his wish.

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If they grow out so as to press on the back-sinew, they sometimes occasion a little lameness. As to those that appear on other parts, it is not worth while to attempt a cure, except they are so large as to be real blemishes.

An instance now and then occurs in which it is quite hard, and the skin over it is loose; in this case it is almost impossible to remove it. If they are observed in their beginning, they should be well rubbed with sharp vinegar or verjuice; but if they are of some standing, and are become hardish, clip away the hair, and apply mild blistering ointments, such as are commended for the bone-spavin; and, in general, whether more easy or more difficult to manage, the best method is to consider, and to treat them in the same manner as the BONE-SPAVIN, which see.

If the splent runs under the back-sinew, bore it in several places with an iron that is moderately hot, and then fire it with an edged instrument, making the lines very close together, then apply the blistering ointment.

STAGG.

## S T A G G - E V I L.

The stagge evil, by some called the hagg evil, is a general convulsion, and closes the jaws so fast, that no force can separate them, without destroying the horse: this symptom is its distinguishing characteristic. Mr. Gibson hath well described this disease as follows:

“ As soon as a horse is seized, his  
 “ head is raised with his nose toward the  
 “ rack; his ears are pricked up, and  
 “ his tail cocked; he looks with eager-  
 “ ness, like a hungry horse when hay is  
 “ put down to him, or, like a high  
 “ spirited horse when he is put upon his  
 “ mettle; insomuch, that those who are  
 “ strangers to such things, when they  
 “ see a horse stand in this manner, will  
 “ scarce believe that any thing of conse-  
 “ quence ails him; but they are soon  
 “ convinced when they see other symp-  
 “ toms come on apace, and that his neck  
 “ grows stiff, cramped, and almost im-  
 “ movable: and if a horse in this condi-  
 “ tion lives a few days, several knots  
 “ will arise in the tendinous parts there-  
 “ of; and all the muscles, both before  
 “ and behind, will be so much pulled  
 “ and



“ and cramped, and so stretched, that  
“ he looks as if he was nailed to the  
“ pavement, with his legs stiff, wide,  
“ and straddling; his skin is drawn so  
“ tight on all parts of the body, that it  
“ is almost impossible to move it; and,  
“ if trial be made to make him walk,  
“ he is ready to fall at every step;  
“ his eyes at length are so fixed as to  
“ give him a deadness in his looks, he  
“ snorts and sneezes often, pants con-  
“ tinually with shortness of breath; and  
“ this symptom increases until he falls  
“ down dead, which happens in a few  
“ days, unless some sudden help can be  
“ given to remove the distemper.”

As in other diseases, so in this, it may be produced by different causes, but the danger is the same in every case. If in the fit, a remission of any of the symptoms is observed it is promising; but if he can lick a little bran, or swallow some water, turn his head a little, or move his eyes, you may, under good management, expect a recovery.

If bot-worms are suspected to be the cause, a mercurial purge should be got down, if possible, before the jaws are fixed. In general, and from any cause, frictions, every two or three hours, on the  
con-



convulsed parts, are very useful ; friction alone, with a hair-cloth, will be sufficient ; but two or three persons should rub, at the same time, on different parts, particularly along the spine, and where the most violent contractions are. Some prefer the use of an ointment to be rubbed in, in which case the following is well adapted to the purpose.

Take of nerve ointment, eight ounces ; oil of amber, two ounces ; mix.

If the jaws are so locked up, that medicines cannot be given by the mouth, they must be administered glyster-wise, for which the following is a good general form.

#### A Nervous Glyster.

Take of rue, penny-royal, and camomile flowers, each a handful ; Valerian-root, two ounces ; boil them a few minutes in four pints and a half of water, and, in the strained liquor, dissolve assafoetida, one ounce ; and opium, from a quarter to half an ounce.

Give this glyster once a-day, and as the symptoms abate, lessen the quantity of opium. As soon as you have hope  
of

of his recovering, leave it off; though the same glyster (but without the opium) may still be repeated.

Support him with glysters of milk porridge, flesh-broth, &c. to the quantity of three or four quarts a-day, or more.

If a ball can be forced down, the following is well calculated to relieve.

Anodyne Ball.

Take of soap-pill and assa foetida, each one ounce; mix, and make a ball for one dose, to be repeated as the case may seem to require.

As to bleeding and purging, either before or after, their use will depend on the state of the horse's constitution.

The custom of rowelling is useless, and of running a red-hot iron through the fore-top and mane, may destroy the cervical ligament; but as it is never useful, it should be quite rejected from practice.

## S T R A I N S.

Strains in horses are frequently called claps: a strain is when the fibres of a muscle or a tendon are so stretched as,  
more

more or less, to lose their natural elasticity.

Plaisters and bandages, where they can be applied, are the principal means of cure in these cases: resolvent and strengthening applications have their use, but the common method of rubbing greasy substances can do no service, nor do they indeed do harm, any farther than, while they are used, other more proper methods are neglected.

If the strain is fresh, and the horse strong and full of good blood, it may be necessary to take away some, to prevent inflammation: if the part be swelled, and a poultice can be conveniently applied, mix bran and vinegar, or bran and verjuice together, without boiling them, into a poultice, and apply it cold, renewing it twice a day at the least. If poultice and bandage cannot be applied, and the part is swelled and inflamed, dip flannel cloths in vinegar, or in two parts vinegar and one of spirit of wine, and stupe therewith, three or four times a day, for a quarter of an hour at a time.

If the swelling is not considerable, and the case a fresh one, wash the part well with vinegar, and with spirit of wine, alternately.



ternately; and when the swelling is wholly subsided, use opodeldoc in their stead.

After bathing the part well, if the situation will admit, let a strong linen roller be applied pretty tight, but not so as to excite pain: let the roller begin a little below, and be continued a little above the affected part. If neither poultice nor bandage can be applied, more pains must be taken to rub the part well with vinegar, spirit of wine, or opodeldoc, as the present state of the case may require.

#### Opodeldoc.

Take of camphor, three ounces; dissolve it in rectified spirit of wine, half a pint; then add of the oil of origanum, two ounces; oil of turpentine, three pints; and Venice-soap, thin sliced, half a pound.

This opodeldoc may be used in case of bruises, numbness in any part, to disperse cold swellings, or it may be given inwardly, in case of gripes or wind from sudden cold, strangury, &c.

Strains in the thigh and the shoulder, require a long time to recover; the parts affected lie too deep to receive much advantage



vantage from external applications. In these cases, the horse should immediately be turned to grass, because the gentle motion which he is led to by his own inclinations, suffices to prevent the joint from growing stiff; and more motion than he finds easy to himself would soon render him incurable. The advantage of rest in these cases is superior to the united assistance of all other means; and a small failure, by putting the horse to exercise, which should never be done before he is perfectly recovered, will overturn every other assistance that art can afford; so that care and patience, as to allowing rest, cannot be too much enforced.

A strain in the shoulder is called also a shoulder-wrench, a shoulder-pight, or a shoulder-splait. A fresh strain in the shoulder is not difficult to discover; but a lameness there from other causes, especially from an afflux of humours, is not so easily distinguished: very often, the disease affecting the whole breast, and the shoulders on both sides, the horse will stumble in going, or drop; however, usually, it may be observed, that when a shoulder is strained, to prevent the pain, he does not put the leg of that shoulder forward; he sets the foot of the sound  
shoulder

shoulder firmly on the ground, in order to save the other: when he stands in the stable, the foot of the lame shoulder is always advanced forward; if you trot him in hand, he brings the lame leg forward circularly, and not directly as the other; if you turn him short on the lame side, he still favours the foot of the lame shoulder, exerting himself with the other leg, and securing himself on the sound foot.

If the strain hath but just happened, or if it be of some days standing, if the pain seem considerable, take away blood according to the age and the strength. Bathe the whole shoulder well with vinegar or verjuice; after some days, if there seems to be no inflammation or swelling, rub it well, for a quarter of an hour every night and morning, with opodeldoc. But if the accident happened some time ago, and there is no sign of inflammation, begin by rubbing the part well with opodeldoc.

When strains happen to the whirl-bone and the hip, the horse drags his leg after him; and when he trots he drops upon the heel: in this case, rest is chiefly to be depended on. If the external muscles only are hurt, the cure is easy, and

admits

admits of assistance from good rubbing with opodeldoc, in conjunction with rest; but when the injured parts are suspected to lie deeper, rest alone is the best means.

When strains happen in the hough, or in any part below it, medicines can be applied more immediately to the part, by consequence, much relief may be expected from such means; rest, the grand requisite in all strains, without exception, being indulged. If then the case is recent, begin with bleeding, if the inflammation requires it, and then proceed to bathe the part well with vinegar, or, if any swelling appears, apply the poultice of bran and vinegar above mentioned. When the inflammation and swelling disappear, or if the accident hath happened several days since, and there is neither of these symptoms, begin by rubbing the opodeldoc well on the part.

Sometimes after strains in this part, there remains hard swellings on its outside, which are best removed by blisters, repeated as directed for the bone-spavin: these swellings remain on the inside they are rarely cured, except by firing.

The knee-pan is called the stifle-bone; the ligaments that spread over it, are  
some.



sometimes so relaxed by strains, that it may very easily be moved about; and when, from accidents of this sort, a horse is lame, the common expression is, he is stifled. Some are of opinion that this bone is dislocated; but that cannot be without dividing the broad ligaments. Lameness in the stifle-bone is known by the horse treading on his toe, not being able to set his heel to the ground. If the accident hath just happened, rub the part well with equal parts of vinegar and spirit of wine, two or three times a-day, and apply a roller as tight as is convenient, without stopping the circulation or giving pain; but if a puffy swelling appear, use some discutient fomentation to disperse it, and finish by rubbing with opodeldoc, not forgetting rest, which should never be omitted, nor bandage, which should always be applied where it can. The knees are subject to strains from blows; in which case, the directions above given will be proper here.

The pasterns too are sometimes strained by external violences, and are, in general, to be treated as before directed; but if they continue very weak, after such means being duly used, let him run some-

somewhat longer at grass, and if this fail, the part must be fired.

Strains in the back-sinews are very frequent, and are as easily known by their swelling; and when the horse stands, his setting the lame leg always before the other. If the case is recent, bleed in the fetlock-vein, afterwards rub the sinew well with vinegar; or, if much swelled, apply the poultice of bran and vinegar; and when the swelling is nearly gone, rub it with opodeldoc twice a-day: keep a light stocking on, for it is, if well fitted, preferable to any bandage. The tight stocking (which should be made of strong cloth that will not easily stretch) is useful in any case, where a considerable relaxation is either a cause or a consequence, as in the grease, &c. But sometimes when the back-sinews have repeatedly suffered in this respect, their relaxation is so great, as not to admit of relief, but by firing, and farther rest at grass.

When the coffin-joint is strained, it soon becomes so stiff that the horse can only step on his toe, and the joint cannot be moved: in this case blistering must first be made use of, as directed in the bone-spavin, and repeat it until the joint

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is free, then fire : the horse all this time running at grafs.

Rowelling is sometimes useful in gross bodied horses, when the swelling hath been pretty considerable. Some bore the shoulder with a hot-iron, and after that blow it up ; but the operation is equally foolish and cruel, for it may aggravate the disease, but cannot contribute to its relief. The practice of some in pegging the sound foot, or applying a patten-shoe, with a view to bring the lame foot on the stretch, is highly to be condemned, as it can only be useful in cases of an opposite nature, i. e. where the contraction of the muscles require their being stretched, and not farther to stretch the too feeble and relaxed. To conclude, let it be remembered in all cases of strains, that the chief service is to be expected from rest, and that particularly at grafs ; or, if that cannot be obtained, let the horse be where he can walk about at his own pleasure: thus will the relaxed tendons best recover their elastic force, and the voluntary motions of the horse will prevent the synovia of the joint, or other causes, from obstructing so as to render it immoveable.



## S T R A N G L E S.

The salivary glands and the muscles of the tongue are the seat of the strangles. The first appearance of it is by a swelling betwixt the two sides of the under-jaw, near to the throat; it extends to the muscles of the tongue, and indeed to most of the adjacent parts; it is attended with great inflammation, pain, and difficulty in swallowing, until matter is formed and discharged externally. Colts, and young horses under six years of age, are generally the subjects of this disease; and it never returns a second time to the same horse.

The symptoms are a fever, a troublesome cough, thirst, a neglect of food, from the pain and difficulty of swallowing; and sometimes so great foreness and swelling about the neck and throat that the horse cannot suffer any thing to touch him there; the eyes constantly water.

When the tumour is in the middle betwixt the two bones of the jaw and near the throat, and when it is single, it soonest digests. If the tumour is near the wind-pipe, and occasions a difficulty of breathing, making the eyes appear as if

they would start out; there is danger of suffocation: but the greatest danger is when, beside these symptoms, there is a discharge from the nose, and particularly if it continue after the tumour is burst. Some improperly call this the bastard-strangles.

Except in the violent degree, in which the eyes seem affected and the nostrils turn out when the breath is forced out of the lungs, bleeding should not be used, but the tumour under the throat should be suppurated with all speed by a warm poultice applied to the part, and renewed as often as it cools: in about a week the matter will be discharged, and the danger will be, for the most part, ended. If the opening is small, enlarge it, and dress with the digestive ointment over the wound, and continue the poultice two or three days longer, to finish the digestion of what may yet remain hard.

The fever may be moderated by cooling and laxative, but not purging glysters; or by the saline powder, as directed in the article FEVERS; but be careful to avoid repellents of all kinds.

As soon as the fever is moderated, if there is any discharge from the nose, give  
one

one ounce of bark every day, and continue it until the discharge is abated; and if any hardness remains about the part where the tumour was, rub it every day with the stronger blue ointment.

The bastard-strangles is a slight degree of the true sort, in which the horse is restless, feverish, and will lay down very often, but soon and suddenly starts up again. Sometimes this name is given to swellings in old horses, about the lower, and sometimes the upper part, betwixt the lower jaw-bones, which arises from a poor, bad habit of body, frequent colds, and hard usage.

### S T R A N G U R Y.

When the urine is frequently discharged, and with difficulty, pain, and by drops, or, at least, in small quantities, at several times, until the bladder hath emptied itself, it is called a strangury; but when there is no discharge, the urine is said to be suppressed.

The strangury and the suppression of urine have often the same causes, the latter being frequently but a greater degree of the former. Wind, or a load of excrements, may cause these complaints,



as it often happens in colics ; but when these are not the cause, they are produced by inflammation in the kidneys, perceived by the fever and particular heat about the loins, or by a paralytic affection there, in which cases the bladder is empty, and there is no motion for staling, but the body soon swells, and blotches appearing on the skin, the beast soon dies. They may be caused too, by a retention of urine, which sometimes happens when the rider pushes on without permitting the horse to stop when he would void it. An ulcer in the kidneys, or in the neck of the bladder, known by the smell of the urine, also occasions these complaints, as also a great heat or sharpness in the urine ; inflammation in the neck of the bladder, discovered by the great heat between the anus and the scrotum, which is usually attended with feverishness ; a spasm, a tumour, or a palsey in the neck of the bladder, also blood obstructing these, after its descent from the kidneys or ureters, &c. may any of them obstruct the passage of the urine ; in these latter cases the horse straddles often, and makes great efforts to stale without any effect, then lays down and rolls about, and if he hath not speedy relief, his flanks are soon observed

served to swell, from the growing fullness of the bladder.

If the cause is from wind or costiveness, the remedy is pointed out under the article COLIC. If inflammation is the source, bleed immediately and freely, according to the condition of the horse, and give the turpentine glyster, after which treat him as directed in the article KIDNEYS DISORDERED.

The following poultice applied a-cross the loins over the kidneys hath been followed by good effects.

Take a handful of garlic, fresh gathered; of mustard-seed and fresh horse-radish root, bruised, each half a pound; camphor, two ounces; green soap, enough to give the whole a proper consistence; spread it on a coarse cloth, and renew it every twenty-four hours until the horse stales easily.

## S T R I N G - H A L T.

The string halt is an involuntary and convulsive motion of the muscles, which extend or bend the hough: if the outside muscles on the inside of his leg are affected, his legs are twitched up to his

M 4                      belly:

belly : sometimes one leg only, at others both are diseased. Strains and blows are the causes to which this disease is generally attributed.

The cure is rarely effected : good rubbing, particularly on the part, with daily but moderate exercise, bids fair in the beginning : the last refuge is firing, which prevents an absolute lameness, but it only palliates the cure.

### S U R B A T I N G.

Surbating is when the foal is bruised, worn, or so spoiled as to become hard and dry, so as to press and hurt the tender part next to it. In this case, careful shoeing is required ; the foal should be kept as soft as possible with grease, or with grease mixed with cow's dung, or with cow's dung and vinegar, kept on as much as possible.

### S U R F E I T.

A surfeit in man is a disorder in the stomach, but in horses its seat is in the blood, and consists in a bad quality thereof.

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The cause is often some other disorder, either neglected or ill managed; sometimes foul feeding is the cause; violent exercise on a full stomach may give rise to it, and many other causes, the recital of which will not contribute much toward the management for a cure.

The signs of this disease are a loss of appetite and flesh, a staring dirty looking coat, scurfy scales in the skin. If in the stable, there is often lumps on various parts of the skin as large as peas, but if turned to grass they soon disappear; if these knots are accompanied with sweats, the disease will soon go off. Sometimes there are dry scabs, in which case the cure is very difficult; as also, if at the same time there is a rough coat, and the hide is bound: when the scabs are dry, and there is no moisture ouzing elsewhere through the skin, it is called a dry surfeit. Sometimes there is a sharp humour, with inflammation about the scabs, and such an itching, that the horse rubs himself until he is raw. There are various degrees of this complaint; for instance, some are only lean and hide-bound, others have an unhealthy look, and grow very inactive; and now and then there are instances where the only

symptom is pain, occasioning a lameness like the rheumatism.

The cure must be begun by bleeding, if the horse is full of blood, but that rarely happens: purging is always necessary; after which, such alteratives should be given, as tend most powerfully to warm the blood and pass through the skin, carefully avoiding an increase of any other evacuation, except gently promoting the urinary discharge. The following is a proper purge.

Take aloes, six drachms; gum guaiacum, half an ounce; honey, or treacle, enough to make a ball.

To warm the blood, and to promote perspiration, give an ounce of the following powder twice a day, and continue it until the cure is perfected.

Take crude antimony, finely levigated, half a pound; gum guaiacum, four ounces; mix.

Or, where it is necessary to be at as little expence as possible, give a purge or two, and try the following powder, in the same manner as the above.

Take

Take crude, antimony and flower of brimstone, of each equal parts; mix them well together.

Where there are any scabs, let them be rubbed with the milder blue ointment every morning and evening; and when this ointment is in use, be careful to keep the horse dry and moderately warm: this ointment not only assists the scabs in falling off, but also contributes very much to the destruction of their causes.

If there is a constant moisture ouzing through the skin, in many parts of the body accompanied with inflammation, purge with Glauber's salt, quickened, if necessary, with a little jalap: repeat the purge once in eight or ten days; and, when the purges are not operating, give two ounces of nitre every day, allowing as much water as the horse will drink; and, with the corn, every night and morning give the powder, with antimony, &c. abovementioned. Carefully avoid all external repellents, for they may drive the humour in some other part, where it may be immediately destructive.



## U L C E R S.

An ulcer is distinguished from a wound by its dry, hard edges, by its disposition to heal, and by the sharp, thin humour that is discharged from its surface. It is a too common practice to dress wounds with sharp, spirituous dressings instead of lint and the common digestive ointment; and thus wounds that would readily heal, are converted into troublesome and tedious ulcers.

Generally a bad habit of body is the cause of ulcers, as well as of their continuance, in which case no cure can be performed before the constitution is mended. But if it is not owing to the fault of the humours, you must endeavour to change it into a wound, by softening the edges, and promoting the digestion of the acrid matter into pus: this last is done by dressing it with the mercurial digestive, or by rubbing the surface gently with the milder blue ointment, each time of dressing, and then, applying a pledget of the digestive ointment, the edges are generally softened by the same means with which digestion is promoted; but if that proves insufficient, touch

touch them at each dressing with the lunar caustic.

If great pain and inflammation attend ulcers, foment them with a decoction made from wormwood, camomile-flowers, bay-leaves, &c. and if there is a tendency to a mortification, add a pint of rectified spirit of wine to each gallon of the fomentation: twice a-day may be a general rule for fomenting and dressing ulcers, where there is much discharge, but once a-day is enough where that is small.

Sometimes ulcers are occasioned by a foul bone which lies immediately underneath them, and which never can be healed until the faulty part of the bone is removed: this is known to be the case when the flesh appears soft and like a quagmire, and when there is a discharge of stinking, greasy water, and, by passing a probe through the flesh, for then you perceive that the bone is rough, which in a healthy state is smooth. In this case, much patience is sometimes required: sometimes the case is trifling, and in three weeks the faulty part separates; at other times a year will hardly suffice for this end; however, if the ulcer is very spongey, a caustic may be applied

plied upon it as large as the faulty scale; and when the bone is quite bare, dress it with dry lint every day; and if there is much discharge, let it be dressed twice a-day: the dry lint will generally suffice. If the carious bone be very foul and stink, the lint that lays next the bone may be dipped in tincture of myrrh; if the ulcer is deep, lint may lay next the bone, and fine tow, made into soft dossils, may do to fill up the hollow space, and prevent the flesh from filling up before the piece of bone is separated, which must not be hurried by any forcible method but, left entirely to this gentle one, by which, if the constitution is good, the end will be obtained; and if it is bad, it must, by proper medicines and diet, be recruited.

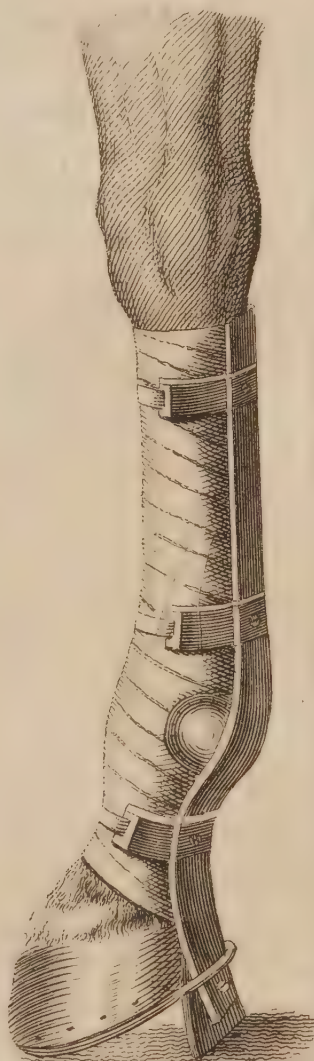
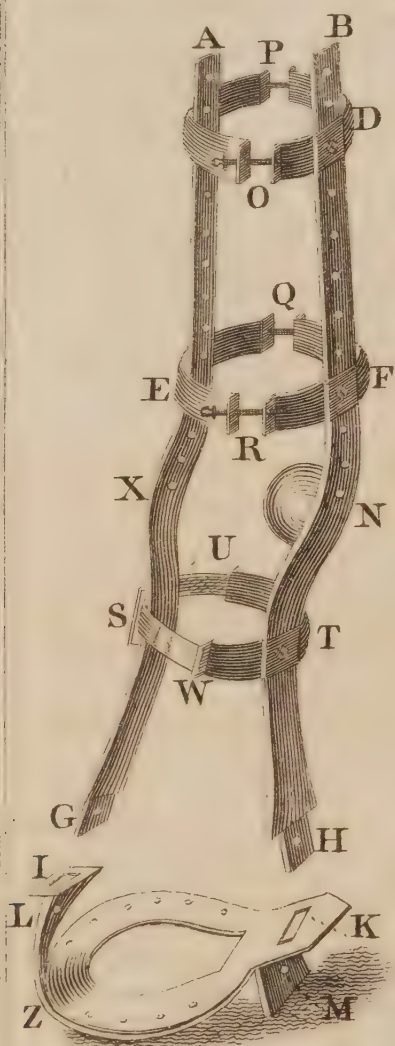
Ulcers may happen on any part of the body: sometimes they are seated on the eye, and their chief distinctions are, that they are more superficial, or more deep; more mild, or more untoward and difficult to cure. For the more superficial and mild sort, the following may be used every three or four hours.

Take pure water, four ounces; sugar-candy, half a drachm; white vitriol, half



*Fig. 2. Machine for  
curing Broken Legs.*

*Fig. 1. pa. 73*





half a drachm; sugar of lead, ten grains; mix.

If with this the ulcer begins to dry, but becomes hot and painful, it may have more water added to the same quantity of ingredients.

For the deeper, fouler, and more obstinate kind, the following may be used three or four times a-day.

Take four ounces of water; sugar-candy, half a drachm; white vitriol, two scruples; camphor, ten grains; mix.

If with this the ulcer is moist, or becomes foul, make it a little stronger by adding more of the ingredients.

Ulcers in the eyes, that are attended with great pain, are relieved by fomenting them with warm milk, tinged with saffron (and in which a little gum arabic is dissolved), two or three times a-day.

If a foul blackish water distills from the ulcer, dress it twice a-day with the following.

Take four ounces of pure water, and add to it fifteen grains of verdigrease, ten grains of camphor, twenty grains of myrrh,



myrrh, and half a drachm of sugar-candy.

A fistulous ulcer frequently happens on the withers from pinching there with the saddle, and neglecting, or improperly treating them: if the bruise is discovered at the first, rub it well two or three times a-day with the following lotion.

Take white vitriol, two drachms; sugar of lead, twenty grains; water, four ounces; mix.

Care should be had to distinguish these swellings that happen from the saddle bruising this part, from those that follow, and are the effect of a fever, &c. this latter sort should not be treated with any thing but suppuratives; a warm poultice of scalded bran should be laid on, and renewed two or three times a-day, until the abscess is ripe and bursts; for, if an opening is made before the matter is completely digested, whether the cause of the abscess was from a bruise, or from some other disease settling there, it will equally endanger the part becoming a spongey foul ulcer, which accident, if it befall you, will require a pretty large opening, taking care not to injure the  
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ligament of the neck, which terminates near the withers: if the fungus and the discharge from it be disagreeable and troublesome, dress it twice a-day with pledgets dipped in the following.

Take of blue vitriol, half an ounce; dissolve it in a pint of water; add to it oil of turpentine and rectified spirit of wine, of each four ounces; sharp vinegar, six ounces; oil of vitriol, two ounces; mix.

Fistulous ulcers should be laid open to the very bottom, or they will never heal firmly.

## U R I N E B L O O D Y.

When the urine is bloody, many say that the horse hath the mooring. Bloody urine may be caused by ulceration in the kidneys, from violent exercise bursting some of the smaller vessels in the kidneys, or other urinary passages, or any cause that may occasion bursting of the capillary blood-vessels in these parts. If there is a sudden discharge of pure blood by the urinary passages, it comes from the kidneys: but if a small quantity of dark coloured

loured blood, whether it is mixed with purulent matter or not, it proceeds from the bladder.

If the horse is fleshy, and full of good blood, it may be proper to take away three or four pounds; then give an emollient glyster, with two ounces of Glauber's salt dissolved in it; after which give the following ball every four or six hours.

Take of roach alum and dragon's blood, each two drachms, in fine powder; oil of vitriol, ten drops; and conserve of roses, enough to make into a ball.

## VENEMOUS BITES.

Much hath been said on this subject, and great stress hath been laid on particular medicines; but, to what Dr. Mead hath proposed, no valuable addition hath been made. The Doctor's method of treating the bite of a mad dog is as follows.

Bleed immediately, and that freely; then give three quarters of an ounce of the following powder, every night and morning, for ten days; at the end of which,

which, plunge the horse into cold water, every morning, for a month or longer.

Take ash-coloured ground-liverwort, two parts; black pepper, one part; powder, and mix them well together.

It should be observed, that the first signs of madness in most animals is a trembling: but, as to a dog, his being mad is thus known. In the first stage of the distemper he hath great hunger and thirst, his eyes become more and more fierce and flaming, he hangs down his ears, thrusts out his tongue, froths at his mouth, barks at his shadow, runs along with seeming sadness and anxiety, often breathes as if tired with running, draws his tail between his legs, runs against all that is in his way, biting whatever he meets with, and seems to be in haste, but his course is uncertain.

Every healthy dog is so sagacious as to discern when another is mad, whether they see him, or hear his barking, and carefully shun him.

A salivation, by means of the turbith mineral, hath been said to have the best effect, even when the symptoms of the hydrophobia are become very considerable.



able. The turbith may thus be given to dogs.

On the first night give twelve grains of turbith ; it probably may pass of by vomiting, purging, or both ; the next night give twenty-four grains ; and, on the third, forty-eight, and so on until it salivates. A copious salivation is what is depended on, therefore give more or less of the turbith as it may be necessary thereto.

To a horse, the turbith must be given in larger quantities ; such as from twenty to forty grains, and repeated as required, observing the directions given for its use, and in salivations, under the article FARCY.

## V E R T I G O.

The vertigo is true, or symptomatic. The true vertigo is only a less degree of the apoplexy ; and the immediate cause is in the head : whereas the symptomatic vertigo hath its cause in the stomach and bowels, which are affected with spasms, with crude and acrid humours, or other matter which generates wind, and produces most of the appearances of a genuine vertigo : indigestion and worms are  
the

the chief causes of the symptomatic vertigo.

It is sometimes difficult to distinguish this disease from the apoplexy, epilepsy, &c. but, if the horse reels, and runs round some time before he falls, it is a vertigo, and your judgment will farther be directed by observing that he soon recovers, gets up, looks stupid and blind, reels, and falls again, striking against the wall, or the ground, with his head.

From what is said, it will appear, that this disease being known, its species and cause attended to, the method of cure will be looked for under the article APOPLEXY, if it is the true sort: and if it is symptomatic, the cure will consist in curing the disease that is its cause.

## V O M I T I N G.

Horses are often extremely sick, but never vomit, either naturally or by art: the reason is, a peculiar contraction of the gullet, and its spiral direction, before it enters into the stomach.

However, though the more immediate effects of this evacuation are not to be obtained, art hath its substitutes, by which the remoter advantages thereof are happily

happily effected, viz. such as excite coughing, sneezing, and straining to vomit.

Assafoetida, savin, horse-raddish, green juniper wood, and other stimulating and ungrateful things, either singly or mixed in any proportion, wrapped in a thin rag, and fastened to the bit of the bridle, excites a nausea and coughing.

If a drachm of the powdered leaves of assarabacca is blown up the nostrils once or twice a-day, it will very effectually provoke a sneezing.

## W A R B L E S.

Warbles, called also navel-galls, because they are situated on the spine, opposite to the navel; they are small, hard tumours on that part of the back where the saddle is placed, and have rarely any other cause than its uneasy pressure or pinching: as soon as they are perceived rub them well two or three times a-day with a mixture of camphorated spirit of wine, two ounces; and the spirit of sal ammoniac, half an ounce.

If you must continue to ride the horse before the swelling disappears, be careful that the saddle lays easy, and keep a

doasil

dossil of tow continually moist with the above mixture.

## W A R T S.

Warts, grapes, corns, figs, &c. are excrescences about the feet of horses, principally upon the frush or the foal: some are hard, as corns or warts; others are more soft, such as figs, &c. they are spongey, and grow out most frequently on the side of the frush.

The best method of treating them all, is to cut them as clean away as possible; and if any part is left behind, which was not easy to come at with the knife, touch it with a caustic; and if that fails to destroy the small remains, secure a bit of sublimate upon it. When the root is fairly cleared away, and not before, wash the part daily with the following.

Take of galls, alum, and white vitriol, in powder, each two ounces; boil them a few minutes in four pints of lime-water; and, when cool enough, pour off the the clear liquor, into a bottle, for use.

If



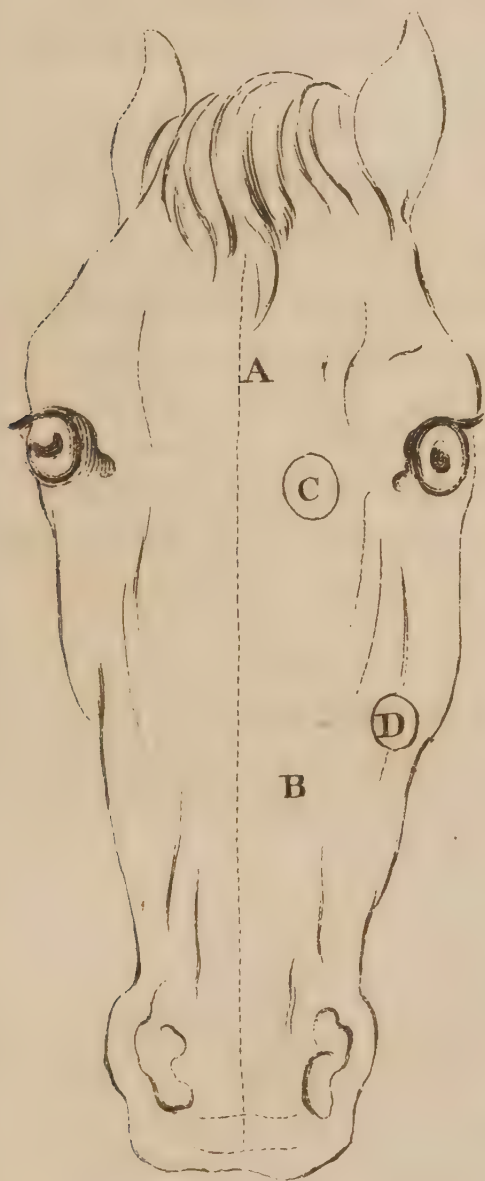
If any of the root remains, it will grow, and the cure is as far off as before it was begun.

If, in cutting off these excrescencies, an artery should be wounded, or a profuse bleeding come on, a dossil of lint may be pressed over the orifice of the the bleeding vessels: over this lay other pledgets of tow, secure them closely, and in such a quantity, as that a due pressure on the part may be made by bandage: remove the dressings in two or three days, but not wholly; leave the dossil of lint which is next to the wounded vessels to digest away; if it adheres at all, cover it up as before with pledgets, secured as at the first, to prevent a fresh bleeding. After the first removal of the dressings, continue to examine and dress the part every day.

### W E N S.

Wens are large insensible tumours that grow on any part of the body, proceeding from internal as well as external causes; their beginnings are very small, and gradually increase; they are seated in the skin, or cellular membrane immediately beneath it.

All





All wens are contained in a bag, which is chiefly formed of the ruptured vessels. See CAPELLETS. The contents of these tumours are various; sometimes watery, at others fatty or suety, like paste, &c.

When the wen hangs by a small neck, it is easily taken away, by a strong thread tied there pretty tight; every day draw it tighter, until the wen drops off: but if the basis is broad, or hath several roots, as it were, it is often the best to do nothing: but if the cure is attempted, as extirpation is the only, or, at least, the best by many degrees, the whole bag, with its contents, must be dissected away, or destroyed by a caustic; then the part may be dressed as a common wound.

If these tumours are suspected to proceed from an internal cause, as may be the case when they gradually appear, and one follows another on different parts, it is the best to let them alone, especially if they are of a watery kind, which often wear away again, insensibly, without any aid, except, indeed, that their bulk is troublesome, and the part that connects them with the body is very small.



## W I N D - G A L L S.

Wind-galls are soft swellings, which give way when pressed with the finger, and resume their shape on the removal of the pressure: their contents are air, with a sort of jelly, whence some chuse to name them jelly-galls.

They are found on various parts of the body, where there are membranous or tendinous expansions, but generally their seat is about the back-sinews, on the fore and hind legs, and most frequently on the latter.

When seated near the joints, or upon the tendons, their cause is, for the most part, a bruise or strain, and their contents are both air and a sort of a jelly; but when the interstices between the muscles are the seat, their contents are only air.

Beside their unsightliness, in hot weather, and on hard roads, they make the horse go lame: yet, weakly young horses, as they get strength, generally out-grow them, though nothing hath been applied to destroy them.

Those that contain only air, may be opened and treated as a common wound:  
those

those that contain a quantity of jelly, and have their seat on a tendon, may be tried with astringent applications and bandage, such as a decoction of oak-bark, with alum in verjuice, with which the wind-gall may be frequently washed, and a flannel rag, dipped in it, may be secured on the part with a proper bandage; but the best method is the application of blisters to the part. Apply a little of the following ointment every other day for a week, and a discharge will be brought on, but cannot easily be continued: when it ceases, the horse may return to his labour a little while, after which repeat this application, once in a month, until the cure is effected, which will sometimes be a year or more. Thus you prevent scars, which are a necessary consequence, and, indeed, sometimes a fullness, or a stiffness in the joint, when firing is used.

#### Blistering Ointment.

Take of cantharides, two drachms; euphorbium, one drachm; Flander's oil of bays, one ounce; mix them well together.

## W O L V E S   T E E T H .

Wolves teeth are those teeth which grow irregularly, and so pointed that they prick the tongue or gums in eating. Old horses, whose upper-teeth over-shoot the under, are the most liable to this accident. The best relief is to file them down to a proper shape and size.

## W   O   R   M   S .

There are several sorts of worms that disturb the health of horses, viz. the bot-worm, the long and round worm, the ascarides, truncheons, and a sort which Solleyfell says resemble wood-lice, only that they have fewer feet, are of a deep reddish colour, velvety on the back like a bat, and made up of several folds: he says that they eat through the stomach; and that in dead horses he hath usually found them in that part: but as there is no evidence of these species affecting a living horse, we need not concern ourselves farther about them.

Bot-worms resemble a large maggot, composed of circular rings, having many little, sharp, prickly feet, along the sides  
of

of their bellies, like those of the millepedes; they have great heads and small tails, and are of an orange colour. They are generated in the stomach, and in the strait gut; those in the gut are of a paler colour than those in the stomach; in other respects they are the same: the eggs of these worms are lodged in the stomach, about its lower orifice; but under the inner coat thereof, which they burst through with their tails, and hind part of their bodies foremost when they are formed into life, the fore part of their bodies remaining so firmly in the muscular coat, that when a stomach is examined, and one of these worms is found there, it is with difficulty forced out. From this muscular coat they suck their nourishment, and often, by ulcerating the part, speedily destroy the horse. Sometimes, at their coming to life, they cause convulsions, and until the fit comes on, there is rarely any previous symptom (see CONVULSIONS); though if a bot is discovered in the dung, or if any have been seen a little time before, the cause may readily be judged of.

For the most part, April, May, or June, are the seasons in which the botworms are troublesome; and are ge-



generally those that are seated in the gut, from whence they are thrown out with the dung very frequently, and are surrounded with much yellow matter. After the just named season, they are rarely seen, and when they appear, seldom continue more than two or three weeks; these are not so dangerous, as those in the stomach, but they occasion the horse to rub his fundament very frequently against any post that he can come at; they make him very lean, and his hair stares like that of a surfeited horse; he frequently strikes his belly with his hind-feet, seems as if he was griped now and then, but not so violently as to roll, &c. as in colicky complaints; he will often lay himself down on his belly very quietly, and then get up and eat as though nothing ailed him. If a bot is seen in his dung, and he frequently rubs his tail as though it itched, there is no doubt of the bots being the cause of all the other symptoms.

The long, round worms are like the earth-worms, except that they are sharper at their ends, and are tougher in the middle; they are often eighteen inches long, and as thick as a small finger. These worms are met with in all seasons of

of the year, and make a horse very inactive and dispirited.

The ascarides, called also needle-worms, are a small slender sort of worms, with flat heads; they are sometimes of a whitish, at others of a blueish colour; they are principally in the small guts and in the rectum, and are thrown out in great abundance with the excrements; they are observed in all the seasons of the year; and make the horse look lean and jaded, his coat stare, he often strikes his belly with his hind-feet, lays down quietly upon his belly, and, after a short time, he rises up without any signs of uneasiness. And what is more peculiar to this sort of worms than to others, is, that they occasion sick fits that return frequently, but soon go off each time, after which he eats with a good appetite; but his tongue is usually white and his breath offensive.

Truncheons are a short, thick species, with black and hard heads.

As the general source of worms is a vitiated appetite and a weak digestion, bitters will be needful to mend the stomach, and mercurial, with other metallic preparations, to destroy the present race, and prevent the generation of future ones.

Of metallic bodies, the properest are mercury, antimony, tin, and iron.

As in all worm cases purging precedes every other means, give him in the morning, fasting, the following bolus.

Take of calomel, three drachms, or half an ounce; diapente, half an ounce; treacle, enough to make a bolus. The next morning give one of the purging balls, directed under the article PURGES, and repeat the bolus and purge every eight days.

Or, the bolus and purge may be united as follows, and given every eighth day.

Rub two drachms of quicksilver, with half an ounce of Venice-turpentine, until no glistening can be discerned; then add of Succotorine aloes, one ounce; of ginger, two drachms; treacle, enough to make a ball. If this purge too slowly, add as much jalap as is necessary.

Dr. Bracken advises to begin the cure by giving the horse two quarts of warm ale-wort, three mornings, and on the fourth to give the purge: thus the worms will be less able to resist the effects of the purge, and so be driven out more effectually.

Fine

Fine raspins of tin and Æthiops mineral, of each half an ounce; or one ounce of the filings of iron, may be given in a mash, or with corn, every night, for three or four weeks.

If the horse is tender and weakly, and feeds but poorly, give him the following

#### Stomach Drink.

Take gentian root, six ounces; camomile flowers, two handfulls; Peruvian-bark, two ounces; filings of iron, half a pound; juniper-berries, four ounces; infuse them, six or eight days, in three gallons of ale, shaking the vessel now and then; after which give a pint of the clear liquor two or three times a-day.

If the horse is robust, but hath worms, from full but bad feeding, give him, with his corn, a handful of rue, garlic, tansey, favin, or other such like vegetable. Some have ventured to give half an ounce of cut tobacco with the corn, once a day, for two or three weeks.

The round worms are generally destroyed with filings of tin, joined with bitters, and a purge now and then, thus:

N 5

Take



Take the filings of tin, and myrrh, of each half an ounce; make them into a ball with honey, and repeat it twice a-day. But before giving this ball, give a purging ball with aloes, and repeat it once in eight days.

If any come away dead, you may conclude that they are all killed.

But of all the species, bot-worms are the worst, particularly if they are in the stomach, those in the guts being rather troublesome than dangerous. To destroy the bots in the stomach, calomel should be first given, and that freely; but as the convulsions soon shut up the horse's mouth, and, usually, there are no preceeding symptoms to warn you before the violent attack, therefore if bots are any way suspected, loose no time, but immediately get down the following bolus.

Take calomel and London philonum, of each half an ounce; honey, enough to make a bolus; and, if possible, repeat a lesser dose, in four or five days, and a common purging ball the day following; but if the mouth be closed proceed as directed in the articles CONVULSIONS and STAGG-EVIL.

Bots,

Bots in the strait gut are easily destroyed by giving a large spoonfull of favin, twice a-day, in bran, or corn, a little moistened, and an aloetic purge at proper distances from each other.

Both common salt and salt-petre are very efficacious and useful in cases of worms, particularly against a species not yet mentioned, and that in some counties are called needle-worms; they are slender, about an inch long, of a yellowish colour. Two ounces of either of these salts may be given every night in a mash, or any other convenient method, for two or three weeks.

## W O U N D S.

Dr. Haller hath endeavoured to prove that the tendons, ligaments, and membranes, are, in a healthy state, incapable of pain; but his apprehended discovery is not so true as he imagines, nor has his assertions, concerning this subject, made any alteration in practice. Every one is sensible that, in a disordered state, these parts are subject to many violent and dangerous symptoms; but yet the Doctor's remarks may encourage us to use certain operations on these parts with

more freedom, and to have more favourable expectations of a recovery, when accidents thereon are under judicious management.

A fresh wound on the limbs, or any external fleshy part, seldom requires more than the following treatment: if the lips recede far from each other, they may be brought together by one or more stitches, formed by passing a crooked needle, armed with waxed thread, through them; let the needle enter about half an inch, or more, from the edge of the wound; pass pretty deep into the flesh, and appear again about the same distance from the edge on the other side; then secure it by a common knot, having first brought the two lips of the wound near enough to touch. One stitch is enough in a wound that is three inches long. If the stitch is likely to break out again, by reason of the motion of the part, it may be omitted; and, as in other slighter cases, dress it up with dry lint, which secure by a pledget of tow, spread with the digestive ointment: let the first dressing abide two or three days; then, only take away what separates easily, for the next dressings will bring the rest without violence. After the first time, let it be dressed every day  
once,



once, or, if there is a great discharge of matter, let it be dressed twice. It is never necessary to warm the ointments when a wound is dressed; so doing may have its inconveniencies, but never can do any service.

If proud flesh arise, it is not necessary to regard it, except it arises above the surface of the skin; and then, fresh dry lint laid on it, every day, will suppress it: or, if this fail, touch the proud flesh, where it is the most prominent, with Roman vitriol, or with a caustic. Many farriers torment the poor horses, by rubbing the tender wound with tow at each dressing: this practice is cruel and injurious; all that is necessary is, at each dressing, gently to dab the sore with soft tow, so as to suck up what matter may seem to lay loose, but not to wipe it dry.

Wounds about the eyes may be dressed with honey of roses, mixed with a small quantity of the tincture of myrrh.

If wounds happen in the feet, from gravel, nails, or any pointed bodies, as the feet are tender they soon inflame, and, as their bones are spongey, if matter is pent up near them, they soon are in danger of being destroyed.

All



All extraneous bodies, such as sand, gravel, nails, &c. should be carefully extracted; and, if this is done, soon after the accident, as soon as the offending matter is extracted, wash the part with the oil of turpentine, and if a puncture is made, drop a little into it also: if the nail, or whatever else be deep, pare away the soal, so as that, by means of a small pair of forceps, it may be extracted, or, at least, brought away by digestion.

After all possible care to extract the offending bodies, some portion will sometimes remain behind; or, it may be, that the accident happened several days before it was observed: in these cases there will be much pain; a suppuration will follow; by which, as by nature's own efforts, the part will be relieved, though sometimes not without drawing the soal.

If the tendon is not much wounded, by the extraneous body which is forced into the foot, it rarely happens that the soal requires drawing; but if it be, the soal must be drawn, to give vent to the gleet which will follow from an injury in this part.

When gravel is the cause of lameness in the feet, it generally passes up the nail-holes, where, being pressed on by succeeding

ceeding portions, it reaches the quick, and then cannot return, but works its way to the coronet, and generally produces a quittor.

If the extraneous body hath wounded the joint of the foot, matter will most probably be formed there, which, for want of being discharged, will become corrosive: then the cartilage there will be destroyed, and the case will be incurable. Or, if the nut-bone be injured by any nail, or other sharp body, the case will also be irremediable.

Gun-shot wounds differ not from any other, except in the contusion and laceration of the parts, and sometimes the admission of extraneous bodies; they require no other treatment than is common in other wounds, except care to extract and remove all foreign matter that is lodged in them, as soon as is convenient; to bleed more freely, because it is rare that much blood is lost at the time of the accident. Contused wounds always require blood to be taken away; but when blood was lost from the wound at the time the accident happened, bleeding will be in proportion the less necessary; and to watch against a mortification, which, on account of the contusion, is

apt

apt to come on more readily than if the wound was made simply by incision.

If the bleeding from a wounded artery be considerable, the best way is to pass a crooked needle, armed with waxed thread, under the artery, and to tie it up ; or, if this cannot be done, dip a button of lint into a solution of Roman vitriol, and keep it tight on the bleeding orifice.

An over-reach is when the point of the hind-toe wounds the heel of the fore-leg. These wounds are both a bruise and a wound, whence they are sometimes troublesome to heal.

PART

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P R A C T I C A L  
F A R R I E R Y.

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P A R T III.

Of DRUGS and MEDICINES, proper to  
be used in those DISORDERS to which  
the HORSE is subject.

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THE excellence and utility of the  
horse is universally agreed to; and  
yet such is the general inattention to  
what sort of medicines are prepared for  
the removal of his diseases, that the note  
of a drug's worthlessness is, "that it is  
"not fit for a horse." The care of the  
humane extends to the brute creation;  
and,



and, for the satisfaction of such, the following observations are made on some of the principal articles used by farriers, in order to assist in detecting counterfeit drugs, and obtaining genuine ones: thus the best assistance may be expected that medicines can afford in favour of a creature, that is at once the means of pleasure and important profit to mankind.

### A L O E S.

Aloes being a general purge for horses, renders an account of its properties a suitable addition to the art of farriery.

There are various species of aloes, viz. the Succotorine, the Barbadoes, and the horse-aloes; but, upon the whole, the Succotorine are to be preferred. The purging quality resides wholly in their gummy part, and the resinous part is that which gripes, sickens, and gives horses so much pain during the operation; particularly when they are injuriously, or carelessly administered. The horse-aloes abounds the most with gum; the Barbadoes contains the most resin; the Succotorine possesses a medium, and is also free from a nauseous flavour that proves very offensive in the other species.

species. But if the resin be separated, the gum of any of these species may be indiscriminately used.

The principal sensible characteristic, by which to distinguish the Succotorine aloes from the other inferior species, which, sometimes are so good, that they are easily imposed for the best, is the agreeable aromatic flavour of the Succotorine, which is totally wanting in all the other sorts; which, instead of being agreeable, as the Succotorine is, are very nauseous and disgusting.

The aloe is a warm, stimulating purge, and, in costive habits, where particular circumstances do not forbid its use, it is the most proper among the whole tribe of purging medicines; for, instead of inducing a costiveness after its manifest operation is finished, a soluble state of the bowels is usually continued for many days: and if given for some time in doses, too small to run off by stool, it enters the circulation, thins the blood, and warms it: hence it is not adviseable for hot fiery horses; for whom senna and Glauber's salt are more proper.

ALUM.

## A L U M.

Alum is a powerfully astringent, and moderately styptic salt, obtained by art, from the pyrites and other stones; it is constituted of a peculiar metallic earth, and the vitriolic acid. A solution of alum in water, dropped into an infusion of galls, turns it white, as the solution of vitriol turns it black.

The sorts in common use are the English or white, and the rock, roch, or Roman: the common sort is transparent, and without colour; the roch is transparent, but of a reddish hue: the roch alum is oft counterfeited by colouring the common sort, but is thus detected; if you break the fictitious, it is of a paler colour within than without, while the true sort is of a deeper red inwardly.

In general, either sort may be indiscriminately used, though, the roch is the mildest, and most agreeable to the stomach. The alums are powerfully astringent, either inwardly used or outwardly applied; but the vitriols are more powerful styptics.

Burnt alum is often, though injudiciously, used for destroying proud-flesh in wounds;

wounds ; it hardens the part too much to admit a speedy healing ; however, it is burnt in the following manner : put any quantity of either common or roch alum into an iron ladle, over the fire, and hold it there until all vapours cease to exhale, and the alum is become quite spongey, then let it cool gradually, and keep it dry.

Alum is mixed with other ingredients to stop violent scourings, bloody urine, and other excessive discharges ; and the following preparation is more convenient for internal use, than the alum in its natural state. Take equal parts of roch alum and dragon's blood ; powder them fine, and mix them well together ; then melt them over the fire in an iron ladle ; and, when the mass is cold, powder it fine and keep it for use. Half an ounce of this powder may be given at once, with other proper ingredients, in all cases in which alum is prescribed, and may be repeated as the occasion may require.

For external uses the crude alum is the most proper.

ALTERA-



## A L T E R A T I V E S.

Alteratives are such medicines as change the quality of the fluids, from a diseased to a healthy state, without sensibly altering their respective natural discharges.

Purging, and other evacuating medicines, given in such small doses as to produce but little sensible effect, and repeated at proper intervals, are very powerful alteratives; for, though the excretions are not thereby much increased, the secretions are happily assisted and regulated: these medicines thus administered, or in combination with other alteratives more particularly adapted to the case, enter into the constitution, and operate as it were on the disease itself, which could not be in many cases, if their effects were principally determined to the bowels.

Thus, for example: Take, from a quarter to half an ounce of Succotorine aloes, rub it well with an equal quantity of cream of tartar; add to this, one drachm of jalap, in fine powder, and one drachm of the salt of tartar; then make them into a ball with treacle, and give it  
once

once or twice a week, or just so as to keep the belly gently lax, and continue it as long as the case requires. This composition goes off by urine as much as by stool.

The most important of these medicines, commonly called alteratives, are antimony, quicksilver, nitre, and some others; all which will be taken notice of together under their respective heads, with their various preparations, and their most advantageous combinations. But, in truth, all medicines either are, or become, alterative, by the mode of their administration: and in their use, it is worthy of attention, in all cases, that if the disease hath any degree of obstinacy, these medicines require to be continued a considerable time.

### A N I S E - S E E D S.

If these seeds are good, they are agreeable to the taste, warm, sweetish, and have also an aromatic odour. The smallest sort, if not immature nor shrivelled, if they possess the just named marks of goodness, are the best. Their chief uses are, to warm the stomach and bowels, to dispel wind and vapours therefrom; to  
relieve

relieve the gripes, colic, and other such disorders in the first passages.

## A N T I M O N Y.

Antimony and its preparations are in such general use among farriers, and of such extensive service, both in the managing of horses and in their diseases, as to render any useful remark on it, a valuable addition to this treatise.

Antimony is a semi-metal, very heavy and brittle; it is composed of long shining streaks, somewhat like needles, and a dark lead coloured matter. The best is known by the darkness of its colour, by its great weight, by its being free from a spongy appearance and from blebs, by the largeness of its streaks, and by its totally evaporating on a strong fire. It consists chiefly of a sulphur and a metallic part; in this metallic part all its virtue resides: the sulphur is no other than its natural corrector, which, in a certain proportion with the metal, the whole is almost inactive, though the metallic part is so exceeding virulent when the sulphur is all separated, which is nearly the case in that preparation called stibium, or glass of antimony.

If

It is a most powerful alterative and evacuant, it opens all the secretions, and increases all the natural excretions; though in horses it chiefly passes off by perspiration: but, whether it be given in its crude state, or some of its preparations be used, such as the *crocus metallorum*, &c. it is necessary that it be not only powdered, but also levigated to the greatest degree of fineness; for if, as is common, it be given in the form of a coarse powder, the greatest part runs off with the dung, and but a very small portion stays in the body to effect those great changes that, with proper management, it is capable of effecting.

The usual method of giving antimony is to moisten the corn, and then mix them together: but the best method to give this, or any other powder, is to mix it with sweet, fresh bran, which may be lightly sprinkled with water, to enable it the better to take up the medicine.

Beside the crude antimony, the chief of its preparations in use among farriers, is the liver and the saffron of antimony (this last is called *crocus metallorum*); and often these two are used indiscriminately, their difference consisting only in this, viz. the liver is somewhat less active

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than



than the saffron, as in the liver the sulphur remains in a greater portion: they are either of them given to the quantity of two ounces in a day; but if the saffron is used, one ounce is enough, for large doses are apt to increase heat without promoting perspiration.

To keep the belly open, and to render the skin sleek, antimony, or one of its preparations, is frequently given with the corn; but if it is observed to create heat and dryness in the skin, instead of a kindly moisture, it will be necessary to decrease the dose, and give an equal quantity of gum guaiacum with them: for example; in general, a quarter of an ounce of each may be given every morning; and, as the skin grows moist, the quantity of antimony may be increased, and that of the guaiacum decreased.

Coughs in the beginning of winter are often relieved by taking the horse up from grass, and giving him one ounce of the crocus metallorum, every day, until a free perspiration is produced.

In hot fiery constitutions, antimony is not very useful; but in poor, cold, phlegmatic habits it is highly so. Horses that are taken up in winter, after having run some time on the after-marsh, want  
their

their blood warming, invigorating, and cleansing: in this case, half an ounce of the crocus metallorum, with half an ounce of gum guaiacum, every day, for a week or ten days, and after that, gradually to increase the antimony, and lessen the gum, produces very salutary effects, especially if accompanied with good feeding.

In all poor, bad habits of body, and diseases from thence arising, as the farcy, surfeits, hide-bound, loss of appetite, mange and other scabby diseases, palfey, &c. antimony is a sovereign medicine.

### B A L L S.

Horses have a very nice taste; it is therefore proper to give the more disagreeable drugs in the form of balls, and to make drenches of the more palatable.

Balls should be of an oval shape, not exceeding the size of a pullet's egg; and should be dipped in sweet oil to make them slip down the easier.

Some horses have a strait gullet, which makes them very averse to a ball being thrust down their throats; such

horses had better have drenches given them, or their medicines may be mixed with bran, or in their mashes.

### B A Y - B E R R I E S.

Bay-berries are warming, of excellent use to cold stomachs, and where digestion is but imperfectly carried on: they powerfully dispel wind, and promote the secretions: in glysters they have great efficacy, for removing pains in the bowels which are caused by taking cold, wind, colic, and other such accidents. They should never be omitted in poultices that are designed to resist or remove a mortification on any external part.

### C A M P H O R.

If camphor is pure, it hath an advantage over most other medicines, for it does not lose any part of its virtue by any degree of time, or of exposure to the air: if it is impure, the eye may easily discern it; and, to separate it from all foreign mixture, dissolve it in rectified spirit of wine; let the solution stand awhile for the feculence to subside; then pour the clear liquor into another vessel,  
and

and gradually pour water into it as long as you can thereby excite a turbid appearance; and thus the pure camphor will fall to the bottom in the form of a powder; pour off the water, and put the camphor, thus purified, into a Florence-wine flask, which place in a sand heat till the camphor is melted; then, immediately, remove the flask from the fire; and, when cold, break it, and you will have the camphor perfectly pure.

Beside the internal use of camphor, as directed in several disorders, in Part II. it is often used externally, with great advantage, as follows.

#### Spirit of Wine camphorated.

To a pint of the best rectified spirit of wine, add one ounce of camphor; let them stand till the camphor is dissolved; then it is fit for use. With this spirit, beginning inflammations are removed; external pains, or such as are not deep seated, numbness, bruises where there is no wound, and mortification, in the external parts, are all greatly relieved, and often quite cured, by rubbing the part affected with it, two or three times a-day.



## D I A P E N T E.

Diapente is a useful medicine ; but as compound medicines are too generally adulterated, or very imperfectly made, the following is the true method of making it. By inserting it in this place, every one, who is careful and industrious, may be sure of using that on which he can place some dependence.

Take gentian root, myrrh, bay-berries, round birthwort-roots, and ivory shavings, of each an equal quantity ; reduce them to a powder.

## G L Y S T E R S.

In all cases of costiveness, or where it is suspected, before the administering a glyster, it will be necessary to perform the operation called back-raking, which is thus: a boy with a small hand should rub it well with oil ; then introduce it into the fundament of the horse, and bring away all the dung that is lodged there ; thus all the impediments to the usual effects of the glyster will be removed, and its operation will be more speedy and more certain.

A pipe

A pipe of about fourteen inches long, fastened in the usual way to a bladder, is to be preferred to a syringe, because the gentle pressure of the liquor from the bladder, does not surprise the horse so much as the strong stream that rushes from the syringe. When all the liquor is passed from the bladder, immediately draw away the pipe, and, at the same instant, press down the horse's tail, and hold it close to the fundament, a minute or two, and he will keep the glyster longer.

The uses of glysters are various, and often important. In fevers, the frequent injection of cooling and emollient glysters are highly necessary. In suppressions of urine, laxative and terebinthinated glysters sometimes relieve when all other means fail. By glysters horses have been nourished several days, when, from convulsions and other causes, nothing could be passed down into the stomach. In inflammation of the bowels, glysters answer the end of a fomentation to the part. And in many other cases they prove either excellent remedies or excellent assistants to other medicines.

Four pints is a sufficient quantity in all common cases; where larger or lesser

quantities are the most proper, will be learnt, by what is observed on this subject in the different parts of this work.

Nourishing glysters should not exceed two, or, at the most, three pints at one time, but should be often repeated. Glysters of this intention should not be very fat; they may be made of sheep's head broth, or of the broth from sheep's trotters, or of any other flesh meat, or of milk-pottage, rice-milk, &c.

In a lax, or scouring, two pints at once should never be exceeded. In general, when you would have a glyster to be retained a long time, its quantity should be small, and it should be very often repeated.

When a glyster is designed simply as a fomentation, from four to six pints may be used at once: the quantity will be less or more according to the size of the horse.

#### A Purging Glyster.

Take of fenna leaves, one ounce; common salt, two table-spoons full; aniseeds, bruised, half an ounce; infuse them in boiling water, in which let them stand until it begins to cool, then to the  
clear

clear liquor add half a pint of common sweet oil.

Glysters should be given while the liquor is as warm as you can bear it on the back of your hand.

Solutions of aloes, and other strong purgatives, such as bitter apples, &c. if used in glysters, occasion griping and much uneasiness, so should never be used: common salt is the best thing for moving the bowels, and any other addition than a little senna can never be necessary, where the sole intention is to promote the ejection of their contents.

If the dung hath an acid smell, two ounces of hard or of Spanish soap may be dissolved in this purging glyster.

#### An Emollient Glyster.

Take four pints of water-gruel, and two hands full of camomile flowers; just let them boil together, then pour off the clear liquor, to which add half a pound of common sweet oil. N. B. If a large spoonful of common salt is added to this, it will be a good laxative glyster.



## A Restricting Glyster.

Take four ounces of oak-bark, boil it in three pints of water to two, then strain off the liquor, and add half a pint of red Port wine, or in its place an ounce of diascordium.

## A Turpentine Glyster.

Dissolve two ounces of Venice-turpentine in the white and yolk of two eggs; then gradually mix with it four pints of the above emollient glyster.

## J A L A P.

This is one of the best purging medicines for general use: if given in fine powder, mixed with a little mild ale, it will operate gently, and yet effectually; it is as free from the general inconveniences of purging medicines as any in use: it is also gently diuretic as well as purgative; from which circumstance it is peculiarly beneficial to horses, when such diseases attend them as require a purging medicine.

The following is an excellent general form for administering this valuable drug. To eight parts of the powder of jalap, add one part of the powder of ginger, and one part of powdered salt-petre; rub  
them

them very well together, and keep them well corked for future use. From half an ounce to one ounce or more, according to the strength and condition of the horse, may be given for a dose.

If you buy the jalap in the root, chuse the hardest and heaviest pieces, and such as are the darkest coloured: if you break a piece, and find it compact, and with many shining resinous veins in it, which readily catch fire, if held to the flame of a candle, you have a sure mark of its goodness.

### JUNIPER-BERRIES.

Chuse them fresh, large, and free from wrinkles; such as have a warm and sweetish taste, with a slight bitterness upon long chewing. They dispel wind from the stomach and bowels, and are very diuretic, therefore of peculiar use in gravelly, windy, and such like disorders; also the colic, and diseases from indigestion. One ounce of the bruised berries may be boiled, a few minutes, in a pint of any convenient liquor; and, when it is cool enough, the liquor may be strained off and given for a dose, which may be repeated twice in the day, or oftener if required.

## M E R C U R Y.

Mercury is what is commonly called quicksilver. In a due degree of cold, it has all the characters of a perfect metal, it is the next heaviest metal to gold; the purer it is, it is both heavier and more easily divided.

It is often adulterated with lead, but if a little of the suspected quicksilver is held over the fire in an iron ladle, and it totally evaporates in a heat a little greater than that of boiling water, without leaving any dross behind, or spot on the ladle, you may conclude that it is pure. Some people press the quicksilver through white leather, but that only separates some kinds of mixtures.

Adulterated mercury hath often a dark coloured skin upon its surface; or, if rolled on clean writing paper, will make it blackish: nor does impure quicksilver run into round globules, but into oblong and other formed striæ.

The principal preparations of mercury used by farriers, are the Æthiop's mineral, the blue ointment, red precipitate, calomel, and the corrosive sublimed mercury, commonly called sublimate.

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Their

Their uses will easily be known, by observing the purposes to which they are applied in the different cases, which make the principal part of this book. The two first are so easily prepared, that it is the prescriber's fault if they are not genuine; and as to the other three, the trouble that attends the discovery of their imperfection, is more expensive than purchasing them of those who are most eminent for their integrity in making them, though their price may exceed that of the vilest cheat. However, for the satisfaction of those who are desirous of proceeding properly in the use of such powerful medicines, I will just observe, that as to the red precipitate it is hardly ever necessary; for other escharotics, such as dry lint, Roman vitriol, or the lunar caustic, may be used in its stead: but, if it is preferred to these, as it is only mixed with red lead, a little more than is common must be used when the precipitate is suspected. As to the calomel, the chief care is to have it so finely powdered that, if it is held in the sun, no shining points or particles can be seen. And, as to the sublimate, the only suspicion is, that a portion of arsenic is mixed with it; but as this is very improbable



bable, and if it is, the quantity is too small to produce sensible inconvenience in the manner of using this medicine in farriery.

### M I T H R I D A T E.

This is an article of some note; but as it is made at present, it is too much compounded to admit of any marks of genuineness. Mithridates, king of Pontus and Bithynia, was its first prescriber, and from him it hath its name. The following is the original form, which, from its simplicity, may be preferred to the endless farrago in the present method of making this medicine.

Mithridate's Prescription for the Electary now called Mithridate.

Take two dried wallnuts, two figs, twenty leaves of rue, common salt, enough to make a confect.

The present method of making this electary, takes in nearly fifty different articles; at different periods of time, the number has been greater and less, but when the intention of the medicine is duly considered, the following must be allowed to be the most deserving of notice and use.

The

The most approved Method of making Mithri-date.

Take of bay-berries, two pounds and an half; ginger, half a pound; gum storax, four ounces; gentian root, two ounces; opium, seven drachms; powder these well together, then mix the powder with ten pounds of honey.

### M Y R R H.

The best and finest myrrh is almost transparent, is not difficultly powdered, though it is rather unctuous to the touch, of a reddish yellow colour, hath a brisk and agreeable odour, rather pungent to the taste, and very bitter, with a small degree of aromatic flavour. It warms and strengthens, and powerfully promotes the secretions; it greatly resists putrefaction, whether internally administered or externally applied; and it thins viscid humours.

### N I T R E.

Nitre, which is salt-petre purified, is a medicine of extensive use. It is a neutral salt, formed of the common vegetable fixed alkali, and a peculiar acid. It is useful in all inflammatory diseases, and particularly fevers, and in beginning

ning colds; it promotes urine, and allays its inordinate heat. As an alterative it is very efficacious in the cure of surfeits, molten greafe, hide-bound, greasy heels, farcy, &c.

As an alterative, from two to three ounces should be given a-day: it may be powdered and given with the corn, or made into a ball with honey; or it may be dissolved in water and given in his drink. In some tender stomachs, nitre creates some uneasiness, but that is easily removed by giving plenty of drink.

Whenever nitre is given, plenty of drink should be allowed, for thus you not only prevent the uneasiness which it occasions in tender stomachs, but also assist and improve its efficacy.

#### P A L M - O I L.

If this oil is genuine, it is about the consistence of good fresh butter; it is almost insipid, but hath a strong, though agreeable odour, and is of a reddish yellow colour; if long kept it becomes of a whitish colour: its use is chiefly for rubbing on parts affected with pain or numbness; though when mixed with other ingredients, it is made useful on various occasions.

#### PURGES.

## P U R G E S.

When purging medicines are given to a horse, it is supposed that the bad humours are separated, and thrown out from the good: but the truth is, that the good and the bad are cast out together; and that, in the same proportion which they had in the body. The different effects of purging medicines, proceed chiefly from the different force with which they stimulate.

There is another prevailing opinion, which is equally false but more barbarous, viz. that if a purge passes through without great disturbance to the horse, its efficacy is but trifling; whereas, those that operate with the greatest ease, have always the best effects. It may here be observed, that the stomach and bowels of horses are much more thin and tender than those of most other animals of the same bulk; hence they are more easily irritated, are more subject to pain and inflammation: beside this, horses, from their horizontal position, and the long tract of their bowels, which are about thirty yards in length, are purged with difficulty; a medicine given one morning



ing, does not operate until the next: all these circumstances considered will lead us, first, to a suitable preparation before a course of purging is begun; and, secondly, to avoid refinous and other violent stimulating medicines.

A proper choice of drugs being made, to facilitate their passage through the bowels, let the horse be fed once or twice a-day, for a week before the first dose of physic, with scalded bran; and if it is a full-fed horse, let his diet be somewhat lowered during his preparation.

Give purging medicines, early in a morning, on an empty stomach; and two or three hours after, give scalded bran, after which give small quantities of hay, oftener or seldomer, according to the appetite; give another mash of bran at noon, and a third at night; but if the horse refuse warm mashes, give him the same quantity of sweet, dry bran.

The custom of giving horses cold water to drink, immediately after giving a dose of any purging medicine, is rarely to be countenanced; if they refuse warm drink, we have no other resource, but the white water is generally the best, and should be given warm; and if a little nitre be dissolved in it, the discharge by  
urine.

urine being at the same time promoted, the whole operation will be carried on with advantage.

### The White Drink.

Take warm water, and stir a sufficient quantity of oatmeal into it to make it whitish. If oatmeal is not at hand, put in as much bran as is necessary to make the water whitish. When the coarser parts are fallen to the bottom, pour off the clear, for the horse to drink.

Next morning let him have another mash, if he chuses it; and he must have warm white drink ready by him, that he may drink as often as he pleases. Ride him gently, so as to keep him warm, but not to make him hot, for sweating very powerfully checks the intended evacuation: ride him thus once, twice, or thrice a-day, more or less, according as the medicines affect him; and, at night, give him a feed of oats with bran, which continue every night until the next dose is given, except the horse hath naturally a lax belly, in which case the bran will be unnecessary, if not rather hurtful.

Six days, at least, should pass betwixt the repetition of each dose of any purging medicine that is given to a horse; and it is most prudent to give a mild purge at the first, in order to form a proper judgment of his habit of body; and, if it does not operate by purging him, that need not occasion any concern, for it may be other ways useful, either as an alterative or a diuretic, or by passing some other way.

Sometimes a purge not operating will occasion a swelling in the body, a loss of appetite to food, and the horse refuses his water: in this case, until a passage is obtained, he must not be rid about, but gently led in the hand, and give him the following ball.

Take of Castile soap, one ounce; oil of juniper, two drachms; treacle, enough to make a ball. This will first promote urine, and then assist the purge.

Or the following drink, or ball, may be given.

Take of camphor, one drachm; powder it by rubbing it with a few drops of water; add to it, of nitre, in powder, one ounce; and of the oil of juniper,  
two

two drachms; honey, four ounces; and of good ale, a pint. Or,

Take of Venice-turpentine, one ounce; mix it well with the yolk of an egg; then add to it, one ounce of nitre, finely powdered; of aniseeds, half an ounce; rectified oil of amber, two drachms; treacle, enough to make a ball.

In case of a purge operating too much, give diacodium, one ounce; and repeat it twice or three times a-day, mixed with a pint of red Port wine. If the gripes are violent, give glysters made of fat broths, with eighty or an hundred drops of liquid laudanum in each; repeat them at proper intervals, until he is easier. For common drink give the following.

#### The Arabic Solution.

Take of gum arabic and gum dragon, of each four ounces; juniper-berries and carraway-seeds, each one ounce; cloves, half an ounce; boil them gently, in a gallon of water, until the gums are dissolved. Add a quart of this solution to each pail-full of water, and if the horse refuses to drink it thus, give the solution alone with the horn.

Some



Some delicate horses lose their appetite by purging; in such cases give them a cordial ball, or warm drink, made with a strong infusion of double camomile-flowers, with a few aniseeds and a little saffron.

When mercurial physic is used, the best is to give two drachms of calomel, made into a ball, over night, and the purging medicine the next morning: great care must be taken to prevent the horse catching cold when mercurial purges are given.

As in the article evacuants it is said, that, in general, where a redundance of serum is to be discharged, purging is one proper means; so here we will particularize some instances where evacuation, by the intestines are peculiarly useful.

When horses are taken up from grass, a purge or two is necessary, particularly if he is of a full and gross habit; but if he is poor, his blood thin and watery, it will be better to recruit him, by giving him a generous diet; and when his strength is well established, give him purges, mixed with cordials and diuretics. After poor feeding, purges should always be of the gentler sort, and  
should

should be compounded with cordials and diuretics.

Flying rheumatisms, and wandering pains, when they occasion lameness, is relieved by purging; but attenuating alteratives should be given every day, in which the purges are not operating.

All obitinate and dry coughs require mild mercurial purges, and are much relieved by them.

Horses that have been kept in the stable all the winter, that have been well fed, and but little exercised, should be purged once or twice before they are turned out to grass in spring: in this case, to loose a little blood will be necessary too, if the horse is full of flesh.

Loss of appetite, either from indigestion or excessive feeding, requires a few mild purges.

In worm cases, in most loosenesses, and cases of extraordinary coliciveness, gross habits, swelled legs, jaundice, watery diseases, particularly where a sharp humour flows through the skin, about the pasterns and legs, are all greatly relieved by proper purges.

Horses of a hot fiery nature should not have the warmer purgatives, with  
aloes,

aloes, &c. but the mild and cooling, with Glauber's salt, &c.

It should not be forgot, that horses which are kept at hard meat, are generally most difficult to be moved with purging medicines.

Here follows some general forms of purges.

Take of Succotorine aloes, ten drachms; jalap and salt of tartar, each two drachms; ginger, one drachm; treacle, enough to make a ball. Or,

Take aloes and cream of tartar, of each one ounce, jalap, two drachms; ginger, one drachm; treacle, enough to make a ball. Or,

Take of aloes, one ounce; East India rhubarb, half an ounce; ginger, one drachm; treacle, enough to make a ball.

N. B. Half an ounce of Venice-soap, or cream of tartar, may be added to any of the above balls, to render their operation milder.

Some horses have very narrow throats, and swallow a ball very difficultly: and, as with mankind, some horses have great aversions to particular forms of medicines.

When

When the balls are not convenient, give the following

Purging Drink.

Take two ounces of senna, infuse it in a pint of boiling water until it is cool enough to put into a phial, then pour off the clear liquor, and dissolve in it four ounces of Glauber's salt; and if it be required to be yet stronger, add two drachms of jalap powder.

R O W E L L I N G.

What is called by surgeons a seton, and a fontanel, is called by farriers, a rowel, and a fonticle. They are both artificial openings into the cellular membrane under the skin, in order to relieve a particular part from an unnatural load of humours.

As in the use of purges, so in the case of rowels, there is a discharge of a supposed superfluous quantity of fluid, but no discriminating separation of the bad from the good; it is the quantity alone, and not the quality of what is discharged, that is the foundation of relief, and the true principle on which their use is proposed. What usually circulates  
P through



through the divided vessels indiscriminately, now flows out; and thus a surcharge on some adjacent part is relieved.

Hence these discharges will, at once, appear improper in lean horses, and such as have not too great a quantity of serous juices, let the attending disease be what it will; for, except there is also a redundancy in the general habit, an accidental partial fullness in any part will not justify this sort of evacuation; except only in some cases of lameness or pain, from an extravasation: but these cases should be very clear before these means are admitted; for this supposed extravasated matter, is not alone drawn off; the constitution is robbed of the same quantity as it would have lost in case of a rowel being applied, when no such extravasation existed.

But in disorders from a fullness of sharp, poor blood, where there is a manifest load thereof on the eyes, lungs, or other principal parts, rowelling will be useful; but not till after having first, by due purging or diuretics, and alterative medicines, partly carried off the disease: then, when a recovery is somewhat advanced, by means of good nourishment,  
proper

proper alteratives and evacnants may be admitted. The rowel should be placed where it may most probably relieve the aggrieved part; then, by lessening the fullness there, the vessels may probably recover their tone, and the cure be happily completed.

### S A L A M M O N I A C.

This is a neutral salt. It is known by its yielding a pungent urinous smell, on being mixed with unquenched lime; and if it is made with the marine acid, it emits a white vapour, on dropping the oil of vitriol into a solution of it in water: this sort is the best. The impurities found in it are easily separated, by dissolving it in water, and either filtering it through paper, or leaving it to subside. As a medicine, it powerfully dissolves the humours, and passes freely by sweat or urine, according as the horse is kept warm or cool: if warm, it passes through the skin; if cool, it runs off more copiously by urine. It is of singular efficacy in fevers; and in any case where the secretions are to be promoted; and a preternatural degree of heat is to be reduced.

## S E N A.

Chuse that which is of a bright colour, fresh, without many stalks, agreeably scented, and with sharp-pointed leaves. To prevent its griping, infuse it in the proportion of half an ounce in a pint of cold water; let them stand together ten or twelve hours, then pour off the clear liquor, and dissolve half an ounce of cream of tartar in it.

## V E N I C E T R E A C L E.

This, like the mithridate, contains a great number of articles; so that a fraudulent composition cannot be detected. It was originally intended, as an improvement on the mithridate; if, therefore, it is made in the same manner, and with the same ingredients as the mithridate, only omitting five drachms of the seven of opium, a much better medicine is prepared than that which is usually sold under the name of Venice treacle: it is a milder opiate than the mithridate; in other respects they are to be considered as the same medicine.

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